British Waterways

Droitwich Canals Conservation Plan

Final Draft

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Prepared by British Waterways on behalf of the
Droitwich Canals Restoration Partnership

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1. THE VISION

"To create a linear park centred on the restored Droitwich Canals which will seek to conserve and enhance the natural and built environment and provide a range of informal recreational opportunities for local people and visitors, thereby generating economic benefit and contributing to the well being of the people of Worcestershire."

This is the Vision of the Droitwich Canals Restoration Partnership, a partnership of key organisations with the shared ambition to restore the Droitwich Barge and Junction Canals to navigation.

These two historic canals were once the lifeblood of the town of Droitwich Spa and the surrounding areas. Until their abandonment in 1939 they linked Droitwich Spa with the River Severn and ports to the south, and the industrial Midlands, serving the salt trade from the brine springs in the town.

The opportunity has now arisen to breathe new life into these canals by restoring them to navigation and enhancing the canal corridor for local people and visitors alike, whilst retaining their valuable landscape character, biodiversity and historic heritage.

Restoration will create a unique 21-mile cruising ring that can be completed in a weekend by boat, that will be accessible on foot and by bicycle, and will be well linked to other local tourism attractions and a wealth of features that are distinctive to these canals and the area they pass through.

The Partnership is committed to a sustainable approach to the restoration, incorporating environmental, economic and community benefits. This Conservation Plan identifies those features that are significant about the canals and outlines through a series of policy statements the approach to be taken to ensure these features are fully considered during the restoration and beyond.

Fulfilling this Vision will require the support and participation of a wide variety of local and national organisations and funding will need to be secured from a variety of sources. The project has wide public support and there is a clear commitment to making things happen and to create something really special for both current and future generations.

2. SUMMARY STATEMENT OF SIGNIFICANCE

A Quality Local Environment

- The Canals provide an important water environment, closely linked to the River Salwarpe, and one where sufficient flow can be relied upon to utilise the Canals as a sustainable navigation.

Biodiversity

- The canal channel, towpath and offside bank provide a range of habitats of high wildlife value, recognised in the UK and Worcestershire Biodiversity Action Plans, and which support a variety of wetland birds, mammals, invertebrates and plants.
- The Canals support a number of priority species identified in the UK and Worcestershire Biodiversity Action Plans, including water vole, otter and great crested newt
- The Canals have a history of halophytic (salt loving) plant communities, which take advantage of the saline water in the Canals. These species are normally associated with coastal locations.
- Much of the canal is lined with Common Reed , the total of which forms the largest reedbed in Worcestershire and supports a variety of bird and invertebrate species.
- The canals form an integral part of 2 Special Wildlife Sites, the Droitwich Canal and Body Brook Marsh.

Landscape and Amenity

- The Canals are within the Severn and Avon Vales Character Area (106) and the Droitwich area is recognised as particularly important for the salt routes which are preserved in the present day network of roads and lanes.
- The Canals pass through an important landscape of settled and timbered farmlands that once formed part of the Ombersley and Feckenham royal hunting forests.
- The Canals exert their own particular and highly local landscape character, including a variety of character lengths, including urban, semi-urban and rural lengths.

Historical Character and Archaeological Features

- The length from Hanbury to Hawford is formed through a combination of a very early broad canal and a very late narrow canal forming a single through route.
- The canals were created solely to facilitate the production and transport of salt.
- The Barge Canal designed by Brindley was one of the few to be completed before his death.

- The first example of the use of swing bridges is on the Barge Canal.
- The design of the Barge Canal was linked to a specific type of boat, the Severn trow
- The junction between the two canals employed a rare type of lock with 4 sets of gates
- Both canals retain characteristic original features of local vernacular styles.

Sense of Place

- There is already a well established sense of place associated with the canals, which is well recognised by the local community.

Recreation and Access

- The canal towpaths have their own particular character, particularly along the lengths of grass towpath in the rural areas.
- There is already a well established network of local public rights of way, including much of the towpath, which are well used by local people and can be utilised to develop circular walking routes.
- The Canals are an important coarse fishery and are regularly used by a number of angling clubs.
- The connections of the Canals with the River Severn and the Worcester and Birmingham Canal provide an ideal opportunity to create a 21-mile cruising ring centred on Droitwich Spa and Worcester.

Value to the Local Economy

- Restoration of the canals provides an opportunity to boost tourism in the local area and to support both new and existing tourism businesses.
- Canal related developments will enable new canalside housing, leisure and business facilities to be provided.

Value to the Local Community

- The restoration project and subsequent management of the Canals provide excellent opportunities for local people to become involved in voluntary work, such as practical projects, interpretation, education and fundraising.

Education and Training

- The Canals will provide excellent opportunities for both school education and lifelong learning and will be available as a linear ‘training studio’ for people to develop new skills.

Health and Human Welfare

- The restored canals will be able to benefit local people by providing areas of tranquillity and opportunities for a range of healthy exercise in the town and countryside.

3. INTRODUCTION TO THE PROJECT

3.1 Background

3.1.1 The restoration of the Droitwich Barge and Junction Canals is being project managed by British Waterways on behalf of the Droitwich Canals Restoration Partnership. This Partnership includes British Waterways, Worcestershire County Council, Wychavon District Council, the Droitwich Canals Trust and The Waterways Trust.

3.1.2 The restoration of the Droitwich Barge and Junction Canals will link the Worcester and Birmingham Canal to the River Severn and create a new 21-mile cruising ring.

3.1.3 The Partnership is seeking around £11.0 million to fund the restoration. Outline approval for funding has been received from the Heritage Lottery Fund and Advantage West Midlands and has been approved by Worcestershire County Council and Wychavon District Council.

3.1.4 It is intended that British Waterways will be the lead partner and will manage the canals as part of their national waterway network. Worcestershire County Council may also be involved in the management of recreation and access facilities within the canal corridor, but their involvement would be dependent on a core revenue budget being agreed. The whole project will be steered by the Partnership, consisting of elected members and senior staff from the partner organisations, and will be managed by a dedicated Project Team.

3.1.5 In order to take a strategic approach to environment and heritage issues this Conservation Plan has been developed. The development of such plans is considered best practice in the planning of canal restoration projects and also supports the Partnership's bid to the Heritage Lottery Fund for funding. This Plan sets out policies and key actions to guide the restoration of the Canals and their subsequent management to ensure that environmental and heritage issues are planned in a strategic manner. It also seeks to incorporate the concept of sustainable development by making links between the environment and economic, community issues and wise use of resources.

3.1.6 This Conservation Plan is innovative in that it utilises the Quality of Life Capital methodology, which has been developed by the Countryside Agency, the Environment Agency, English Nature and English Heritage. This is the first time that this has been used for a canal project.

3.1.7 The Conservation Plan provides a strategic lead for many other aspects of the project, including the engineering design, the Environmental Impact Assessment, the Tourism and Visitor Management Plan and the Biodiversity Action Plan. Survey work on conservation and heritage features undertaken to date will be used to develop all these aspects of the project. The EIA and the BAP, in particular, will cover the specific conservation actions required to

deliver the policies set out in this Conservation Plan and to identify timetables for works.

3.1.8 The Plan is to be signed up to by all members of the Partnership once its contents have been agreed by the Heritage Lottery Fund as satisfying there requirements in terms of Stage II funding for the project.

3.2 The Conservation Plan

3.2.1 This Conservation Plan has been prepared by British Waterways on behalf of the Droitwich Canals Restoration Partnership, in consultation with a number of key organisations. It is intended that the Plan will be adopted as a working tool by the Partnership to guide both the restoration and the long-term management of the Canals.

3.2.2 The Droitwich Canals Restoration Partnership will use this Conservation Plan as part of its bid for funding for restoration from the Heritage Lottery Fund (HLF). This Conservation Plan has been produced ahead of an Environmental Impact Assessment (EIA) and will inform the strategic aspects of the EIA. It looks at the policy context for the restoration and takes on board the views of key stakeholders. The Plan outlines a strategic approach to the restoration and includes a series of policies and actions on key issues.

3.2.3 The main purposes of the Conservation Plan are as follows:-

- To guide the management of the restoration process.
- To plan the long term management of environmental, biodiversity and heritage features for the whole canal and the surrounding land.
- To understand, conserve and enhance the significance of the environment, biodiversity, heritage and visitor resource.
- To determine key policies and actions to conserve and enhance the significance of the Canals.
- To identify opportunities to link environmental, biodiversity and heritage issues to economic and community issues.
- To identify the key benefits to be gained from the restoration.
- To guide all works to be undertaken on the Canals after restoration.
- To satisfy the requirements of the Heritage Lottery Fund as part of a Stage II submission for funding.

The Conservation Plan will be complemented by a Biodiversity Plan and a Tourism and Visitor management Plan for the Droitwich Canals.

3.3 The Benefits of Restoration

3.3.1 The re-opening of the Droitwich Canals will bring a wide range of new benefits to the people of Droitwich Spa and Worcestershire, and to the county's visitors. Some of these benefits will be economic, with the restoration leading to greater expenditure in the local economy and more local jobs. There will also be outputs from proposed canal-side property developments: houses, leisure facilities and enhanced property values.

3.3.2 The principal economic impact of the Droitwich Canals restoration will be to boost tourist and leisure opportunities along the canal corridor. BW predicts there will be a demand for private boat moorings – particularly in the fast-growing time-share sector of the business – as well as chances for commercial operators to expand onto a new waterway. Demand in both the private and commercial sectors will benefit from the creation of a cruising 'ring' comprising the Droitwich Canals, the Worcester & Birmingham Canal and the River Severn. This creation of this cruising ring will also pull in boaters from adjacent waterways.

3.3.3 The economic benefits of the project will not be confined to the Droitwich Canals as it is anticipated that the development of a 21-mile cruising ring will lead to a rise in economic activity on other canals in Worcestershire as well. The restoration will support the current trend in the hire boat market towards short breaks and this will help to retain existing jobs in the hire boat market in the Worcester and Droitwich areas.

3.3.4 Some of the most vital improvements the regeneration of the Droitwich Canals can deliver are social. They will enhance the quality of life of the people who live in Droitwich Spa and the surrounding areas, and the tourists and other visitors who will have new opportunities to use the waterways and the surrounding area for leisure, recreation and education.

3.3.5 The canal restoration will benefit the county as a whole through, for example, the provision of housing on canal-side brownfield sites and the enhancement of local character.

3.3.6 Of equal importance will be a host of environmental benefits, in terms of biodiversity, landscape quality and cultural heritage. The restoration offers the chance to both enhance canal habitats through better management of existing habitats and the creation of new ones, and provide important links with the long industrial history of the Droitwich salt workings.

3.3.7 The restoration project will require some changes to existing environmental features along the canal corridor. These are addressed through this Conservation Plan, the outline Biodiversity Action Plan and the proposed Environmental Impact Assessment. The principal change will be in the areas of reed beds. Although some reeds will need to be removed from the channel to allow navigation, there will be a substantial net biodiversity gain through the construction of new off-line reed beds.

3.3.8 By enabling more resources to be devoted to the management of the waterway environment it is intended that the project will deliver real environmental benefits in terms of landscape quality, wildlife, cultural heritage and education.

3.3.9 By getting others to recognise the significance of the waterways it is hoped that more resources will be devoted to them in the future.

3.4 Description of the Site

3.4.1 The Droitwich Canals consist of 2 canals with a quite different character. They were developed to serve the salt trade in Droitwich. Both Canals were officially abandoned in 1939. Map 1 shows the location of the Canals.

3.4.2 The Barge Canal is 5.75 miles long and links the River Severn to Vines Park within the town of Droitwich Spa. This canal is a broad canal that was built in 1771 by James Brindley, one of the key engineers of the early canals. There are a total of 8 locks along the length.

3.4.3 The Junction Canal was one of the last canals to be completed. It opened in 1854 to link the Barge Canal at Vines Park to the Worcester and Birmingham Canal at Hanbury. It was built by James Boddington as a narrow canal, with a total length of 1.75 miles and 7 locks.

3.4.4 The River Salwarpe rises at Waseley Hills to the north of Bromsgrove, flows through Bromsgrove and Droitwich Spa and into the River Severn at Hawford. It is unusual for its high salt content, particularly downstream of Droitwich Spa. A short section of the Droitwich Canals used a navigable section of the River Salwarpe.

3.4.5 The proposed project relates not only to the Canals themselves, but also to their corridor, the land on either side. The principal works are likely to be carried out on the land owned by members of the Droitwich Canal Partnership. There may also be scope for the Partnership to work with others to promote initiatives such as landscape and access schemes outside the canal corridor, although some of these will require separate funding to the main canal restoration.

3.4.6 Much of the length of the Canals is in water, but often contains reed beds. Parts of the Junction Canal to the east of Droitwich Spa have been incorporated into gardens or built upon, and therefore a new length of canal is proposed on this section.

3.5 Description of the Project

3.5.1 Work on the Junction Canal will involve the creation of a new section of canal and the canalisation of a short section of the River Salwarpe. Work on the Barge Canal will be largely restoration through lock repair and channel dredging.

3.5.2 The main elements of the restoration phase of the work proposed are as follows:-

- A short new section of canal to the east of Droitwich
- Making a short stretch of the River Salwarpe navigable
- A new crossing of the A449 Worcester - Kidderminster Road
- Dredging of the Canals and removal of contamination
- Restoration of heritage features, including locks and bridges, and the development of a 'working heritage'.
- Enhancing the environment, including reed beds, otters, water voles, great crested newts and compensating for any habitat loss.
- Recreation along the whole canal corridor, at a level appropriate to each location in terms of ecological, landscape and heritage issues.
- Development of recreational links with the surrounding countryside.
- Potential to operate as a catalyst to redevelopment of waterside land and of Droitwich Spa

3.5.3 An Environmental Impact Assessment will be carried out alongside the detailed design of works for individual lengths of canal. It will be guided by this Conservation Plan and the Biodiversity Plan, which will set out policies and actions for the whole restoration project. These documents will be submitted in support of the planning application for restoration.

3.6 Planning Permission and EIA Requirements

3.6.1 Initial discussions with Wychavon District Council and the British Waterways legal department have indicated that a full planning application needs to be submitted for restoration of the whole length of the Canals. As the canals are owned by Wychavon, British Waterways would not be carrying out statutory duties and therefore permitted development rights do not apply.

3.6.2 Under the Environmental Impact Assessment Regulations 1999 the new section of the Junction Canal requires an EIA under Schedule 2. Wychavon District Council have confirmed that they expect a statutory EIA for this section and the proposed crossing of the A449 at the western end. Restoration of the remainder of the canal does not require a statutory EIA under the regulations, but the Partnership recognises the benefits of a full consideration of environmental issues and therefore it is intended to carry out a non-statutory EIA for this section. The report may therefore be presented in two sections, one for the Barge Canal and one for the Junction Canal.

3.6.3 The impact of the restoration will deliver widespread environmental, economic, and social benefits to the people of Droitwich Spa, Wychavon, Worcestershire and to visitors from further afield. The canals will boost tourism to the area which will lead to a requirement for improved and expanded waterside facilities such as moorings, shops, offices, bars, parks and housing. This will bring a new quality of life to the area and will lead to both urban and rural regeneration.

3.6.4 In anticipation of this, the 'Droitwich Canals Supplementary Planning Guidance (SPG)' was produced to guide future development along the Canals. The SPG aims to provide an overall vision for waterside regeneration and sustainable development that can be shared by the Partnership, stakeholders and the local community. It provides illustrative schemes to aid with the marketing of sites to developers. Any waterside development must be carefully balanced with the canal's environmental and historic context in order to preserve and compliment its intrinsic character. The Supplementary Planning Guidance will help ensure this happens by setting out the parameters and design guidance that Wychavon District Council would expect developers of individual sites to adhere to in the presentation of any planning applications.

3.7 The Context for the Project

3.7.1 Restoration of the Droitwich Canals needs to be seen in the context of the policy statements and strategies of project partners and other key organisations within the District, County and Region. Many of these reports set out approaches to the management of key issues relating to sustainability and planning. In planning the restoration and subsequent management of the Canals, the Partnership is seeking to make a positive contribution to many of these existing initiatives as well as bringing major benefits from canal restoration in its own right.

3.7.2 A review of the key documents has been carried out as in included in Appendix 1 to this report.

4. CONSULTATIONS

4.1 Previous Consultations

4.1.1 The project to restore the Droitwich Canals has enjoyed a substantial amount of consultation with Partners, stakeholders and the public. Prior to the formation of the Droitwich Canals Restoration Partnership a Community Involvement and Communications Group was set up by the Local Authorities to identify and consult with current and potential interest groups on the restoration project. This group undertook written and verbal consultation with user and interest groups which resulted in many of written letters of support.

4.1.2 One initiative was a major consultation of local businesses and user groups in 2000 which included a business lunch with approximately 100 stakeholders in attendance. This exercise was repeated in May 2003 in association with Droitwich Association of Retail, Tourism and Services (DARTS) to bring local businesses up to date on the project and demonstrate the positive impact restoration will have on their businesses.

4.1.3 Strong local membership of the Droitwich Canals Trust including neighbouring landowners further demonstrates considerable support for the project. The Trust are actively involved in talking to the community at local events and talks and in 2000 they collected 1532 signatures from people registering their support for the restoration project. More recently, British Waterways have been actively promoting the project through presentations to local community and interest groups, press releases and events. The restoration project was used as a case study restoration scheme at the Royal Show 2002 in Warwickshire. Again, there was a great deal of interest and support for the project and responses to a short questionnaire contained in the leaflet ‘Droitwich Canals for the Future’ demonstrated demand for the facilities and activities the project will deliver.

4.1.4 A six week consultation has also been undertaken in 2003 by Wychavon District Council on a Supplementary Planning Guidance (SPG) note for seven key canal-side sites in along the Canals. The purpose of the SPG, once adopted, will be for use as a guide in the determination of Planning Applications. The consultation was supplemented by a well attended "Planning for Real" Workshop in November 2003 to discuss four sites in the SPG. The evening was chaired by Cabe (Commission for Architecture and the Built Environment) and resulted in very constructive comments on proposed canal-side developments which will allow necessary changes to be made to the SPG.

4.2 Public Consultation Event

4.2.1 A Community Workshop was held on 17th December 2002 at the Community Hall in Droitwich Spa to discuss the development of this Conservation Plan. The purpose of this was to provide an opportunity for local people to identify what is important to them about the Canals and what the key issues are for the future. The meeting was co-ordinated by independent facilitators.

4.2.2 The key questions asked were as follows:-

1. What could the restoration project do to improve the quality of life of local people?

2. What are the key issues that should be considered in planning the restoration of the Canals?

3. What aspects of the Canals make them unique?

4.2.3 The main benefits to quality of life were identified as providing opportunities for informal recreation, particularly walking and linking the town to the countryside. The main detractors were health and safety issues, such as dog mess, litter, unsafe surfaces and poor lighting. There was a consensus that the canals could provide a key focal point for the town.

4.2.4 The key issues were identified and scored. Once again, opportunities for walking and informal recreation were considered the key issues. There was general consensus on the need for hard surfacing and lighting in built up areas. Boat moorings were considered important by everyone and many wanted to become involved in voluntary work on the Canals.

4.2.5 Many suggestions were made of unique features of the Canals. Much of this concerned the history of the area and particularly the salt trade. Many unique features were identified in relation to the structures along the canals.

4.2.6 Many of the suggestions from the workshop were incorporated into the Quality of Life Capital Assessment and subsequently into the policies.

4.3 Community Surveys

4.3.1 A number of Community Surveys have taken place for the Droitwich Canals the latest being in 2003. This survey is part of a programme of 'sustainability indicators' monitoring. The impacts of the Droitwich Canals restoration will be monitored and evaluated against a set of quantifiable indicators modelled on the UK government's 'Quality of Life Counts'. To obtain meaningful data, baseline surveys need to be taken prior to restoration for information on visitor attitudes towards the canal environment, its facilities and management. Surveys of local 'canal-side neighbourhoods' provide further evidence of the restoration's impact on the local community. These surveys,

conducted away from the towpath, will gauge local people's use of the waterway, their attitudes towards it and their involvement in the waterway's management.

4.3.2 The 2003 survey covered 108 respondents in the Droitwich area. In summary, respondents clearly valued the canals as a place for recreation, and for their wildlife and heritage. However, this response is balanced with an equal perception that they are underused and need to be re-vitalised. Nearly one in ten of responses were from people claiming they had no interest in the canals, or don't use them at all and ten responses referred to the tourism potential of the canals, reflecting a perception of an under-used economic asset.

4.3.3 When questioned about aspirations for the canals, responses indicated strong support for restoring the canals, for generally tidying them up, for conserving their wildlife and heritage features and for improving their walkways and pathways.

4.4 Consultations with Interested Parties

4.4.1 During the preparation of the Conservation Plan a number of interested parties were consulted either through telephone conversations or direct meetings. The purpose of these consultations was to identify the key issues that each organisation wish to see included in the Conservation Plan. Wherever possible their comments have been included in the Quality of Life Capital assessment and have contributed to the formulation of policies and key actions.

4.4.2 The following organisations were consulted during the preparation of the Consultation draft of the Plan:-

British Waterways – Watford and Lapworth
Droitwich Canals Trust
English Heritage
English Nature
Environment Agency
North Claines Parish Council
The Waterways Trust
Worcestershire Biodiversity Partnership
Worcestershire County Council
Worcestershire Wildlife Trust
Wychavon District Council

4.4.3 The Consultation Draft of this Plan went out for consultation for a six week period in February and March 2004. Copies were sent to key organisations and were made available to the public through local libraries, Council Offices and the One Stop Shop in Droitwich Spa. A wide range of responses were received and suggested changes have been incorporated into this Final Draft wherever possible.

5. ASSESSMENT OF SIGNIFICANCE

5.1 A Quality Local Environment

- **Hydrogeology and Water Quality**

5.1.1 The main aquifer underlying the canals is in the Mildenham Mill area, where the Barge Canal is underlain by the Bromsgrove Sandstone formation. Here the aquifer provides a public water supply via the Ombersley Borehole and is within the Source Protection Zone 3 (Total Protection Zone). It has a high vulnerability to surface contamination, and therefore it is essential during restoration and operation of the canal that there is no impact on groundwater supplies through pollution.

5.1.2 Further information is needed on the risk to groundwater from contaminated land. This will require further research on current and historical land use to help to identify and mitigate any environmental effects.

5.1.3 Water quality in the Droitwich Canals is not currently monitored under the Environment Agency's routine monitoring programme. However under the current regime the Junction Canal is supplied by the Worcester & Birmingham Canal and therefore water quality in the Junction Canal will be related to this supply.

5.1.4 Water quality for the Worcester & Birmingham Canal under the Environment Agency's General Quality Assessment (GQA) Scheme for the stretch which includes the junction with the Junction Canal was graded as poor quality (GQA (chemistry) grade E) in 2002.

5.1.5 There are pollution risks to the canals from existing discharges and diffuse sources such as field drainage. Where these are identified, British Waterways will work with the Environment Agency and landowners to minimise them. A total catchment management approach will be needed to address the issues fully.

5.1.6 Concern has been expressed over the lockage of water from the Junction Canal (consisting of poor quality water from the Worcester and Birmingham Canal) entering the River Salwarpe and causing a deterioration in water quality during low flow in the river. It is likely, therefore, that a pipeline will be constructed to convey water from the Junction Canal to the Barge Canal, which will minimise mixing with the River Salwarpe.

5.1.7 Currently, the Barge Canal is fed by the River Salwarpe. Although an existing abstraction exists for the Barge Canal, the state of the Barge Lock and gates at the junction with the river, means that flows into the Barge Canal are uncontrolled. A variation to this licence is proposed and this will include a control structure. Lockages are, however likely to more than offset any reduction in the use of the abstraction point. It is suspected that the saline water of the River Salwarpe has caused the Barge Canal to be also saline,

resulting in halophytic plants and salt tolerant invertebrates populating the canal. The bypass pipeline and management of flows to the Barge Canal may reduce its salinity with consequences for the salt tolerant fauna and flora. Historically, the Worcester and Birmingham Canal was also saline and although it is not now many of the species remain.

5.1.8 There are currently overflows from the Barge Canal to the River Salwarpe and the Martin Brook that could have water quality implications in the river. The impact of these will require further investigation.

- **Water Resources and Drainage**

5.1.9 Previous water resources studies have estimated the future demands for water when the canal is restored. These include water losses from the canal and predicted lock usage using British Waterways 'Boat Model'. These water demands will be met partly from the River Salwarpe, using a single licensed abstraction point (replacing the existing three abstraction licences), and from surplus water supplies on the Birmingham Canals Navigations via the Worcester & Birmingham Canal. In periods of extreme drought there will be insufficient water available from the BCN. Development of new external or British Waterways resources, or backpumping will have to be deployed to avoid potential restrictions to navigation during periods of drought.

5.1.10 These theoretical calculations will need to be confirmed with actual measurements of lock usage and water losses. This will require the establishment of a network of monitoring sites on the restored canal as part of British Waterways' national water resources monitoring programme.

5.1.11 Adequate flow carrying capacity of the canal is an important aspect of the restoration project for effective and safe conveyance of water supplies. Detailed engineering design will also need to include improvements to the hydraulic capacity of the Worcester & Birmingham Canal structures within the transfer route from BCN. Any impacts on the Bittell Reservoirs SSSI through changes in demand will need to be addressed through the EIA.

5.1.12 The canal, in some places, will be constructed within the flood plain of the River Salwarpe and a full flood risk assessment will be undertaken as part of the detailed design of the scheme. This will include the potential of the canal to be used to mitigate flood risk.

- **Soils and Contaminated Land**

5.1.13 The main issue in relation to soil is the disposal of dredgings to agricultural land. This is covered in the Waste section below.

5.1.14 Also the area around Vines Park contains mercury contamination, which will need to be addressed in planning any new development associated with the canal. An Envirocheck Report has been prepared to compile information on potential contaminated areas. Contamination is more likely to

be an issue for associated developments rather than the canal restoration and will be dealt with by the relevant developer. Close liaison will be required with the Environment Agency, local authorities and developers.

- **Waste**

5.1.15 The major waste issue for the canal restoration and subsequent management is the disposal of dredgings. Two options have been considered, agricultural disposal in accordance with the ADAS National Procedures and Rates and disposal at local landfill sites. Dredging and waste disposal will be addressed through a more detailed dredging strategy as part of the design of the scheme.

5.1.16 Randal Surveys undertook a survey of dredging requirements and identified the amount of dredgings, based on a 1.5m depth on the Barge Canal and 1.35m on the Junction Canal. However, the dredging profile will be constrained by environmental and financial considerations.

5.1.17 Analysis of silts has identified high levels of contamination in the Vines Park area, which would inhibit disposal of dredgings to agricultural land as a soil conditioner. Contaminated silts would need to be removed from site by a specialist dredging contractor and disposed of at a registered site, such as Hartlebury or Bromsgrove, ensuring that the site has a relevant licence or permit allowing the disposal of dredgings with the exact level of contaminants present.

5.1.18 Dredgings from the Barge Canal would contain very low levels of contamination and are deemed to be suitable for agricultural disposal. Areas will need to be identified and arrangements made with landowners who may be affected. It is proposed that a Dredging Strategy will be developed for the restoration phase. This will include consideration of the quality of grasslands adjacent to the canals, and unimproved and semi-improved grasslands in particular.

5.1.19 Where disposal to agricultural land is proposed, detailed consideration will need to be given to the ecological, landscape and archaeological benefits and disbenefits of those sites. Archaeology will be a particularly important consideration where there are upstanding remains, such as ridge and furrow earthworks, identified through the Archaeological Desk-Based Assessment. These have all been plotted on a set of maps accompanying the engineering designs. The intention is that some dredgings will be disposed of at Mildenham Mill on the site proposed for a new area of reed bed where this will be beneficial to reedbed establishment. This will enable the seed bank in the canal to be used to develop the new reed bed. Detailed proposals will be drawn together in the Dredging Strategy.

5.2 Biodiversity

Biodiversity Action Plan

5.2.1 A full Biodiversity Action Plan (BAP) to complement this Conservation Plan is being prepared for the Droitwich Canals during spring and summer 2004. An outline BAP, based on existing data and drawing on the UK, Worcestershire and British Waterways BAPs has now been produced and is available .

5.2.2 The BAP approach is similar to the Conservation Plan. It assesses the resource, its significance and actions required. The BAP will be used alongside the Conservation Plan in determining issues and solutions throughout the restoration and in subsequent management of the canals.

5.2.3 The biodiversity information below is summarised from the recent surveys and the current outline BAP

Surveys

5.2.4 Much of the information needed for the BAP has already been prepared. Any additional survey work needed will be identified and programmed into the final BAP.

5.2.5 Ecological surveys undertaken for the Droitwich Canals include a Phase 1 habitat survey of the canal and surrounding area undertaken in 1999 by Worcestershire Wildlife Consultancy. This survey also collated information on species and habitats in the area through a desk based study and new survey work. The main habitats present are summarised on Map 4.

5.2.6 Other recent surveys include great crested newts (2002), bats and bat roosts (2003) breeding birds (2003) and water voles (2003)

General Significance

5.2.7 The canal channel, towpath and offside bank provide a range of habitats which support a variety of wetland birds, mammals, invertebrates and plants. The Canals have a history of halophytic (salt loving) plant communities, which take advantage of the saline water in the Canals. These species are normally associated with coastal locations.

5.2.8 Much of the canal is lined with Common Reed , the total of which forms the largest reedbed in Worcestershire and supports a variety of bird and invertebrate species.

5.2.9 The canals form an integral part of 2 Special Wildlife Sites, the Droitwich Canal and Body Brook Marsh. The Droitwich Canal SWS includes both the Barge and Junction Canals and supports a wide range of habitats, and particularly extensive reed beds and the salt loving plants found to the

west of Vines Park in Droitwich Spa. The Body Brook Marsh SWS is an area of woodland adjoining the Body Brook, which incorporates a small reed bed and a marsh.

5.2.10 There are 4 other Special Wildlife Sites nearby, which are the Salwarpe Valley, the River Salwarpe, the River Severn and the Worcester and Birmingham Canal. The close proximity of all these sites provides a significant network of wildlife habitats in the area.

Summary of Significant Biodiversity Habitats and Species

5.2.11 The Canals are within a landscape dominated by grassland, agriculture, woodland and urban areas. The canal corridor provides an assemblage of valuable habitats, providing refuge for a wide variety of plants and animals.

5.2.12 The outline BAP for the Droitwich Canals gives more detail on the key features of significance, both habitats and species.

Wildlife Habitats

- **Canal and river channels**

5.2.13 The Droitwich Canals and their channel are an important open water habitat within a landscape dominated by agriculture and urban areas. The side arms, ponds, winding holes and locks, weirs and riverine sections add to the diversity of this linear habitat.

- **Waterway banks**

5.2.14 The banks and margins of the Droitwich Canals provide a continuous, linear corridor of habitat. Vegetation types range from the tall fringes of emergent plants to land plants higher up the bank. These banks are particularly important for biodiversity with many waterbirds, Water Voles, invertebrates such as damselflies, amphibians and reptiles. .

5.2.15 Vegetation of note on the Droitwich Canals includes extensive fringes of Common Reed and Wild Celery in unshaded, sparsely vegetated areas near Droitwich.

- **Towpath verges**

5.2.16 The towpath verges along many sections of the canal support species-rich grassland which contrasts with the species-poor wider agricultural and urban landscape. These verges are important for many meadow plants and invertebrates such as bumblebees. Some areas have been overgrown with brambles, nettles and scrub . This mosaic of habitat provides shelter for a wide range of animals and foraging habitats for predatory animals and birds , including barn owls and buzzards.

- **Hedgerows**

5.2.17 Hedges line much of the canal towpath and off-side. They are a characteristic feature of canals and provide shelter and food for many animals such as birds, invertebrates and mammals. Hedgerow trees are particularly important for bat roosts, bird nest holes and refuges for insects associated with dead or decaying wood.

- **Built structures**

5.2.18 Man-made features such as bridges and locks provide habitat for various species, including some uncommon plants such as lichens, bryophytes and ferns, as well as many unusual invertebrates and insects. Walls or bridges are likely to provide roosting or breeding sites for bats and, perhaps, great crested newts .

- **Ponds**

5.2.19 Ponds are an important part of the Droitwich Canals' biodiversity, adding to the diversity of the open water habitat. . Great Crested and Smooth Newts have been recorded using ponds and pools along the canal corridor

- **Feeders and streams**

5.2.20 A number of running water habitats are found within the canal corridor including Martins Brook, River Salwarpe and the Body Brook. These support a different range of species to the still waters of the Canals..

- **Reedbeds**

5.2.21 The Droitwich Canals are lined with Common Reed ,providing the equivalent of 6.8ha of reedbed. Reedbed is nationally and locally rare, and is a national and local BAP Habitat. About 2.5ha will be lost as a result of restoration but the project includes plans to create new reedbed areas alongside the canals

- **Adjoining land**

5.2.22 The Droitwich Canals pass through both agricultural and urban areas. A wide variety of habitats, such as field margins, woodlands, parks and gardens enhance and are enhanced by the biodiversity of the Droitwich Canals.

- **Field Margins**

5.2.23 Field margins, the strips of uncultivated land along the field boundaries, occur along many sections of the Droitwich Canals and can be very important for biodiversity within, and beyond, the canal corridor.

- **Woodlands, scrub and trees**

5.2.24 There are several areas of woodland along the Droitwich Canals. These vary from natural woodland to recent plantations and include small areas of wet woodland. A wide variety of woodland species occur, though the wooded areas are generally small in area.

5.2.25 Patches of scrub have developed along the canals, which provide similar features to hedges, but also support species totally dependent on this habitat type. Key species are nightingale and tree sparrow

5.2.26 Many individual trees occur along the canals. These include Wild Service Tree (*Sorbus torminalis*) within section 3c and many veteran trees. These are important for the large numbers of species they support.

- **Saline habitats**

5.2.27 The River Salwarpe and the Barge Canal support saline habitats that are unusual for this part of the country. They support a number of locally uncommon species, such as wild celery (*Apium graveolens*) and ten-spined stickleback (*Pungitius pungitius*).

Species

- **Water vole**

5.2.28 Water voles, once abundant, are now scarce and a priority species in the UK and Local BAPs They have declined through mink predation and habitat reduction and are now legally protected..

5.2.29 Surveys in 1999 and 2003 have confirmed that water voles are still present at a few sites along the Droitwich Canals More information will be gathered as the restoration proceeds, as water vole signs can be hard to spot, and colonies move around.

- **Otter**

5.2.30 Worcestershire had lost all its otters by the 1980s, but the species is now re-colonising. They are a priority species in the UK and Local BAPs and are legally protected

5.2.31 Surveys for otters along the Canals suggest that there is otter activity along the Barge Canal as well as adjoining watercourses – notably the Severn and the Body Brook. The canals are thought to provide foraging opportunities with occasional lying up sites, particularly where reed beds occur in dry pounds.

- **Reptiles and Amphibians**

5.2.32 Reptiles and amphibians include several priority species in the UK and Local BAPs, and several species are legally protected. These include slow worm, grass snake and great crested newt, all of which occur along the Canals.

5.2.33 Surveys in 1999 confirmed the species present. Slow worm distribution is quite restricted, with many in gardens or embankments. Grass snakes are more associated with water and are widely distributed from Hawford to the Junction Canal and in the Body Brook Marsh

5.2.34 The key amphibian species found in the Canals is the great crested newt. Worcestershire is a national stronghold for this species. There is a population in the Hanbury Locks area. Further work is needed to consider potential impacts of canal restoration on this species and to design suitable habitats such as a pond with associated grassland areas to provide an alternative enhanced location for the population. .

- **Fish**

5.2.35 Incidental recording of fish have been noted during surveys for other species. The common three-spined stickleback was recorded within section 3 (as shown on Map 3) and is likely to be widespread along the canal. The ten-spined stickleback, an indicator of brackish water, was found within section 3. Carp, Bream Rudd, Three-spined Stickleback and Eel were also found in this section. A large Bullhead population was recorded in the Body Brook, section 7 and section 8.

- **Bats**

5.2.36 The Canals provide good bat habitat, with both roosts and foraging habitat rich in insect prey. Four species (Pipistrelle, Noctule and Daubenton's and Liesler) have been recorded flying over or adjacent to the Droitwich Canal area These are all included in BAPs, and are all legally protected.

5.2.37 A survey of accessible potential roosting sites has suggested that few existing bridges, culverts etc have roosts, but that many have potential. Many canalside trees also have potential. The restoration should provide many opportunities for installing bat roosts.

- **Water plants**

5.2.38 The Canals have a long association with halophytic plants – both emergent and submerged. Unusual water plant species are featured in the British Waterways BAP.

5.2.39 Notable species in recent surveys included Rigid Hornwort (section 4a), the nationally uncommon Soft Hornwort (section 4c) and a stonewort Chara vulgaris var. papillata (section 8a).

- **Birds**

5.2.40 The 1999 and 2003 surveys have confirmed that the Canals and their corridor are important for birds. Not all birds recorded can be considered to be breeding, but they were all using the canal corridor for feeding or roosting.

5.2.41 The Canals are not just important for water birds. The large open habitat surrounding the canal is attractive to many species that commonly occur in agricultural areas or in small scattered woodlands. .

5.2.42 Several of the species present are of conservation concern (as defined in various lists) These include reed warbler, bullfinch, linnet, reed bunting, song thrush, spotted flycatcher, turtle dove, blackbird, dunnock, goldfinch, green woodpecker, kestrel, kingfisher, lesser black backed gull, lesser spotted woodpecker, starling, stock dove, swallow, water rail and yellowhammer.

- **Dragonflies and Damselflies**

5.2.43 Four-spotted Chaser, Common Blue Damselfly, Blue-tailed Damselfly and Banded Demoiselle have been recorded along the canal corridor. Dragonflies and damselflies are included as a group within the British Waterways BAP.

- **Other invertebrates**

5.2.44 There are many sections along the Droitwich Canals which support a diversity of both terrestrial and aquatic invertebrates, including a number of nationally rare species. Aquatic macro-invertebrates were surveyed along the whole canal in 1999. Results showed that invertebrate interest varies, with the some sections (east of Mildenham Mill and the area to the east of the M5, including Body Brook Marsh) particularly rich.

5.2.45 Notable species include scarce beetles, bugs and hoverflies. Some are indicative of saline conditions

5.2.46 Other notable invertebrate species likely to occur along the Canals include freshwater sponges and crayfish. There is no data for these at present. Further surveys for these and other groups (molluscs etc) may be needed.

- **Badgers**

5.2.47 The canal corridor forms suitable badger habitat throughout its length. A badger survey in 1999 found that badgers do use the canal corridor, but that known setts were all on the Barge Canal. Badgers and their setts are legally protected.

- **Conclusions**

5.2.48 The various ecological surveys have suggested that whilst the assemblage of habitats and plants present along the Droitwich Canal are not unique in themselves, they are of value as a whole. The overall mosaic produces an ecological feature of high wildlife value. Many species, particularly plants and invertebrates are uncommon nationally or locally and therefore add to this value.

5.2.49 There are also many habitats and species that feature in the UK, Worcestershire or BW BAPs, and many that are legally protected under UK and European law.

5.2.50 The outline BAP gives more detail on the biodiversity importance and value of the Canals. This should be consulted for more information. It will be developed into a fully comprehensive BAP in Spring/Summer 2004 and will be designed to work closely with this Conservation Plan.

5.3 Landscape and Amenity

- **Countryside Agency Countryside Character Area**

5.3.1 The whole length of the Canals falls within the Severn and Avon Vales Character Area (106). This area extends from Bristol in the south to Bromsgrove in the north. The key characteristics identified by the Countryside Agency and relevant to the Droitwich Canals are as follows:-

- Diverse range of flat and gently undulating landscapes, united by broad river valley character.
- Riverside landscapes with little woodland, often very open.
- Variety of land uses from small pasture fields and commons in the west to intensive agriculture in the east.
- Many ancient market towns and large villages along the rivers.
- Nucleated villages with timber frame and brick buildings.

5.3.2 Droitwich is identified as particularly important because of the salt routes which are still preserved in the present day landscape of roads and lanes.

- **County Landscape Character Assessment**

5.3.3 Worcestershire County Council published a draft Landscape Character Assessment for Worcestershire in 1999. The purpose of this study was to identify the current character of landscapes in the county and to develop policies and guidance to ensure that any projects that may impact on the landscape take account of this character. It divided the county into a number of broad landscape character areas and identified landscape types within those areas. Detailed Landscape Description Units were used to identify key local features. The following is a summary of the elements of landscape character that apply to the Droitwich Canals. These are shown on Map 2.

The Mid-Worcestershire Forest

5.3.4 The whole length of the Droitwich Canals lies within the Mid-Worcestershire Forest landscape character area. This area forms the heart of Worcestershire and consists of a broad rolling plain stretching from the foot of the Malvern and Abberley Hills in the west to the Lenches and the Ridgeway to the east.

5.3.5 This is a lowland region, lying for the most part below 60 metres. Much of the area is underlain by red Triassic mudstones, in places associated with thin bands of Arden sandstone, which give rise locally to a more pronounced undulating topography.

5.3.6 The subdued relief and nature of the underlying geology give rise to frequent poorly draining basins throughout the region. These were formerly inundated by periodic flooding and have developed thin spreads of alluvium. The Rivers Salwarpe and Severn drain much of this area.

5.3.7 The area forms part of a great swath of royal forests that once extended across the central part of the West Midlands. Such a large and distinctive assemblage of forests was quite unique in the country and is an important part of the cultural heritage and landscape of Worcestershire. The presence of the forests led to a dispersed pattern of farmsteads and clusters of wayside dwellings associated with relic commons, together with innumerable small copses and an abundance of hedgerow trees.

5.3.8 Each forest has its own cultural history, which is relevant to the overall landscape evolution of the area. The two covering the area adjacent to the Canals are as follows:-

5.3.9 **Ombersley Forest** – This area included Droitwich Spa and the area to the west. It contains relics of ancient woodland and a dispersed settlement pattern with frequent hamlets. The area appears fairly well wooded although there are only a small number of ancient semi-natural woodland sites. Natural brine welling up from salt deposits led to the development of the salt trade in Droitwich Spa and subsequently to the development of the Canals.

These salty conditions led to the development of salt loving plants along the River Salwarpe and the Droitwich Barge Canal.

5.3.10 **Feckenham Forest** – This covers the area to the east of Droitwich Spa. This was the largest of the royal forests in Worcestershire. It was an area of dispersed settlement, composed of scattered farmsteads and dwellings. Hanbury was the location for one of the king's parks and was at the western edge of the core area of the forest. The abundance of available timber led to some of the best timber framed buildings in the county. Much of the area contains irregular fields with hedges rich in woody species, indicating their origins from assarts cut into ancient woodland.

Timbered Farmlands Landscape Type (118 & 119)

5.3.11 This landscape type covers most of the area to the north of the Canals. It is a small to medium scale wooded, agricultural landscape characterised by filtered views through densely scattered hedgerow trees. It is a complex and in places intimate landscape of irregularly shaped woodlands, winding lanes and frequent wayside dwellings and farmsteads.

5.3.12 The key characteristics are as follows:-

- Filtered views through densely scattered hedgerow trees.
- Predominance of oak trees.
- Organic pattern of winding lanes and hedged fields.
- Irregularly shaped woods of ancient character.
- Dispersed pattern of scattered farmsteads and wayside cottages.
- Rolling lowland with occasional steep-sided hills and low escarpments.

5.3.13 The key element of these landscapes is the strong unifying presence of tree cover in the form of woodlands, hedgerow trees and linear tree cover associated with streams and watercourses. It has a sense of scale and enclosure with key elements being the scale and shape of woodlands and the pattern of hedgerows.

5.3.14 The main concern in seeking to retain the character is the loss of scale and structure caused by the decline and fragmentation of elements of tree cover and the loss of hedgerow trees, and particularly oaks. This area would be an ideal focus for a project to protect and restore hedgerows.

Settled Farmlands with Pastoral Land Use Landscape Type (112)

5.3.15 This covers the area to the south of the canal corridor. The canal largely follows the northern edge of this area. It is a small to medium scale, settled agricultural landscape of scattered farms, relic commons and clusters of wayside dwellings. These built features are linked by a network of narrow, winding lanes which nestle within a matrix of hedged fields. Tree cover is

largely restricted to thinly scattered hedgerow trees and groups of trees around dwellings.

5.3.16 The key characteristics are as follows:-

- Gleyed soils with associated pastoral land uses.
- Small scale landscape defined by prominent pattern of hedged fields.

5.3.17 These landscapes have developed from former open fields and lack a strongly defined nucleated settlement pattern as found in other parts of the county. It has a dispersed settlement pattern of farmsteads and hamlets. Tree cover is most notable along streamsides and watercourses and also in association with settlement. The hedgerow tree cover is different to that of the timbered farmlands due to a lack of oak dominance.

5.3.18 The overall strategy for these Settled Farmlands is to conserve and enhance the unity and small scale, hedged character of the landscape.

Riverside Meadows Landscape Type (114)

5.3.19 This covers the valley of the River Salwarpe and in several places the Barge Canal forms the southern boundary. It is a linear riverine landscape associated with a flat, generally well-defined alluvial floodplain. It is a secluded pastoral landscape, characterised by meandering, tree-lined rivers, flanked by alluvial meadows and grazing animals.

5.3.20 The key characteristics are as follows:-

- Flat low-lying topography.
- Seasonally flooded alluvial floodplain.
- Meandering river channel.
- Grazing meadows.
- Scattered riverside and hedgerow trees.
- Medium to large hedged fields with ditches.
- Unsettled with few roads.

5.3.21 The extensive areas of riverside meadows has, in the past, provided a strong sense of visual and ecological unity. Tree cover is a notable element of these landscapes, typically alder and willow, including pollards. This landscape has been fragmented by the encroachment of arable land uses. It is essentially a linear landscape providing extensive views along the length of the river corridor.

5.3.22 The management strategy for this landscape is one of restoration and conservation of the visual unity and distinctive pastoral character of the landscape.

- **Historical Landscape Characterisation**

5.3.23 The English Heritage sponsored Historic Landscape Characterisation Programme expands the historic coverage within a wider landscape assessment. It provides a framework for broadening our understanding of the whole landscape and runs in partnership with the County Sites and Monuments Records. This has not yet been undertaken for Worcestershire but the project is planned to commence in 2004. The Landscape Character Study undertaken for the canal corridor (see below) takes account of the impact of historic changes and developments within each of the 8 character areas.

- **Landscape Character of the Canal Corridor**

Landscape Character Study

5.3.24 A study was undertaken in 2003 to define landscape character at a local canal scale. Key landscape features and elements were identified to determine the local characteristics that contribute to make the existing landscape character along the length of the Droitwich Barge and Junction Canals.

5.3.25 This study focused on determining the local landscape diversity and local distinctiveness of the canal and its corridor. It highlighted any obvious threats or vulnerabilities to the landscape character that could result from canal restoration but also future associated management.

5.3.26 Eight local character areas were identified, which are set within the larger framework of character types defined at National scale by the Countryside Agency and also at the Local Authority scale by Worcestershire County Council. These are shown on Map 3.

5.3.27 The survey was carried out by British Waterways chartered landscape architects in two stages, a desk study and a field study conducted from the canal towpath, adjoining footpaths and the public highway using photography and site observations.

5.3.28 The study was not restricted to the canals, but encompassed visible landscape from the canal, within the previously identified, 'Zone of Visual Influence', as shown on Map 2.

5.3.29 Dominant elements and features that contribute directly to the overall landscape character of the wider canal corridor (within the zone of visual influence) were identified at the scoping stage.

They have been used to form the following checklists:

- Surrounding Landscape
- Adjacent land use / Land cover
- Views out
- Aesthetic factors – balance, scale, enclosure, diversity and tranquillity
- The canal in the landscape – prominence, linkages, views in
- Historic Canal Route
- Canal Channel
- Channel edges
- Towpath
- Canal activity
- Adjacent activities
- Canal Boundaries
- Canal structures and heritage
- Communications

Canal Context

5.3.30 Within the broader landscape setting outlined above the canal exerts its own particular and highly local character. The canal provides a recurrent and familiar local feature with a number of distinctive urban, semi-urban and rural character lengths, its canal architecture forming a feature of the local landscape.

5.3.31 To the west an intimate rural landscape extends from Droitwich to its junction with the River Severn along the Salwarpe Valley. Here the canal passes through the floodplain, following the River Salwarpe which meanders back and forth along the canal route, linking the canal and river at times to form a powerful and at certain points, an inseparable influence on the surrounding landscape.

5.3.32 A semi-urban and urban character of varying quality dominates the town centre length through Droitwich, from Chawson Valley to the M5 motorway. Vines Park (Scheduled Ancient Monument) is significant, valued as the historical and cultural centre of Droitwich's salt and brine industry.

5.3.33 East of the M5 motorway along the proposed new line of navigation towards Hanbury Wharf and its junction with the Worcester and Birmingham Canal, the landscape rises from the Salwarpe river valley to rounded low hills with areas of woodland and tall hedgerows separating some recent isolated mixed land use. East of the Worcester and Birmingham Canal, the landscape returns to a more rural character with isolated farmsteads and clusters of older wayside dwellings.

Canal Corridor Character

5.3.34 The canal corridor has been divided into local length specific character areas. These canal corridor character areas have been identified through evaluation of the canal in context within its wider landscape, but also by evaluating the character of the canal itself at a local scale.

5.3.35 Within this characterisation there are examples where the local canal corridor demonstrates close association with the surrounding landscape character, sharing common unifying elements. In other areas it is quite separate.

5.3.36 In all areas, the canals are principal landscape elements and were important factors used to determine local canal character areas.

Canal Character Areas

5.3.37 Each of the following character areas has local landscape distinctiveness that varies from other canal character areas, even though they may still share many of the same common elements & features:

01 River Severn to Hawford A449 road crossing

02 Hawford (A449 road crossing) to Lineacres Farm

03 Lineacres Farm to Chawson Valley (A38 road crossing) (Includes sub-area 03a Salwarpe)

04 Chawson Valley (A38 road crossing) to Westacre (Salwarpe road)

05 Westacre (Salwarpe road) to Netherwich Basin

06 Vines Park

07 Vines Park (B4065 road) to M5 (Motorway crossing)

08 M5 (Motorway crossing) to Hanbury Wharf

5.3.38 At the time of writing (March 2004) summaries for each character area were still being prepared. The summary report on the landscape character study will be available to accompany this Conservation Plan.

5.3.39 The summary for each length will include the following headings:

- The Wider Landscape (description)
- The Canal Corridor (description)
- Landscape Features / Elements / Characteristics (wider canal corridor, zone of visual influence, canal specific features)
- Threats/Vulnerability
- Guidelines
- Length Specific Objectives
- Long-term Management

Key issues identified in the assessment

5.3.40 A number of key issues were identified through the assessment, which are relevant to the whole canal corridor. The extent to which they are an issue and how they are applied will vary within each character length, depending on the key elements of that character. These issues are summarised below:-

- Towpath treatments and boundary treatments, such as hedges, walls and fences.
- Views to and from the Canal
- Open character of the canal corridor
- The removal of existing reedbeds and the creation of new reedbeds could impact of the landscape
- Hedgerows
- Tree management, including willow pollards
- Woodland management
- Visual impacts
- Ensuring the use of native species
- Dredging disposals
- Retention of wide water areas
- Relationship between the canals and the River Salwarpe
- Wide character and value of grass towpaths
- Rural tranquillity
- Historic character of Vines Park
- Urban decline
- Urban regeneration pressure and potential
- Built vernacular of red sandstone, local brick and timber framed buildings
- The quality of the canal vernacular is under threat without restoration, and is in need of reinforcement

- **Visual Impacts**

5.3.41 A brief visual impacts survey has been undertaken. This has involved a walk through of the canal and the identification of an outline Zone of Visual Influence (ZVI) for the canals and the mapping of key views of the surrounding landscape from the Canals. This will form a baseline from which more detailed assessments can be carried out as part of the Environmental Impact Assessment, and enhancement and mitigation measures will be developed. The ZVI is shown on Map 2.

5.3.42 The ZVI is quite tight to the canal along much of the length, with occasional distant views out.

5.3.43 The survey identified 2 main key views from the canal. These towards Dodderhill Church and Hadzor Hall and are shown on Map 2.

5.4 Historical Character and Archaeological Features

- **Heritage Principles**

5.4.1 British Waterways has adopted a series of heritage principles to be used when managing inland waterways. It is intended that these will be adopted for use on this project. Appendix 1 includes a summary of these principles.

- **Statutory Designations**

5.4.2 Vines Park is scheduled as an ancient monument under the Ancient Monuments and Archaeological Areas Act 1979. This includes both the Netherwich Basin and Vines Park, and the Saab Garage development sites, but omits the line of the Barge Canal. The boundary is shown on Map 5.

5.4.3 There are a number of Listed Buildings within the scope of the proposed works.

5.4.4 The whole length of the Canals is designated as the Droitwich Canal Conservation Area. The designation includes the whole of the canal, including its locks and bridges. Salwarpe Village is also included in the designation. Designated 1975. The boundary is shown on Map 5.

- **Surveys**

5.4.5 The significance of the Canals in relation to heritage issues has been identified through a number of pieces of work. A survey of canal-related heritage structures was undertaken in 2000 (Richardson 2000) and a desk–based archaeological assessment was carried out in 2003 (Woodiwiss 2003). A map regression exercise has been carried out and a summary of the maps studied is included in Appendix 2. A Gazetteer of Heritage Features has been compiled and is included in Appendix 3.

The Historical Significance of the Droitwich Canals

5.4.6 The Droitwich Canals, comprising the Droitwich Barge Canal (1768-1771) and the Droitwich Junction Canal (1852-1854) are important for their historic engineering and for their association with the salt industry.

5.4.7 The Droitwich Barge Canal has national significance for being a very early, Georgian canal that was designed and constructed by James Brindley and his 'team'. The Droitwich Junction Canal is a late, Victorian canal designed by Boddington and constructed at a time when railways were fast becoming the predominant mode of industrial transport in Britain.

5.4.8 Droitwich is a historically rare example of a town that largely owes its existence to the production of salt. Brine wells in its vicinity had been exploited since at least Roman times. By the mid 18th century salt production had increased dramatically and the 5 - miles long Droitwich Barge Canal was constructed to facilitate the transport of salt between Droitwich and its markets via the River Severn. Further impetus was given to this trade when the 1 - mile long Droitwich Junction Canal was built, linking Droitwich to the Worcester & Birmingham Canal and thence to the West Midlands markets.

5.4.9 The Droitwich Canals straddle the 'canal age' and both are significant for demonstrating the characteristics of their respective periods. Both the canals and their former industrial hinterland form an area of archaeological deposit and archaeological potential.

5.4.10 **Aesthetic value** -The Droitwich canals are important to their communities for the contribution their historic routes, remains and open areas make to the surrounding environment. The canal corridor has been designated as a conservation area in recognition of its special architectural and historic value. A number of structures along the canals have aesthetic value and these include; the locks, the reconstructed swing bridges, and the surviving fixed bridges from the Brindley period. These are typologically similar to those on the primeval Bridgwater Canal (c1759-1763) and as such have high heritage value.

5.4.11 **Historic value** - The canals are significant illustrations of past human activity (principally navigation, salt mining and transportation) in the Droitwich area. The Droitwich Barge Canal is particularly important for its association with James Brindley, long regarded as the 'father' of England's man-made inland waterways. Particular examples of Brindley's legacy include the 'contour' route of the canal, the grouped locks and the characteristic shallow arched bridges with stone drip-moulds to the arch rings and stone copings to the parapets.

5.4.12 Brindley was assisted in the work of engineering the Droitwich Barge Canal by Robert Whitworth and John Priddey. Whitworth in particular became a prolific canal engineer and his early association with the Droitwich Barge Canal was significant to the development of his later career.

5.4.13 The Droitwich Barge Canal was designed specifically to enable cargo sailing barges known as Severn trows to trade up to Droitwich. The 'Wich barges', as the Droitwich trows were called, maintained a square rig until well into the 19th century and were typically 40 to 80 tons capacity. There is some archaeological potential for the remains of sunken trows along the route of the canal.

5.4.14 Historic maps reveal the existence of many wharfs, landings, basins and side arms leading into salt works and factories in Droitwich. The archaeological potential of such remains is significant.

5.4.15 **Technical value** - The Droitwich Barge Canal typifies Brindley's 'classic' approach to canal building; follow the contours, avoid dramatic approaches to obstacles, group locks together where possible, seek water supplies from natural sources (the River Salwarpe). The locks were originally 64' by 14'6", but were lengthened to 71' by 6" in 1854 when the Droitwich Junction Canal was built. In a rare instance of locks that were designed to take trows being enlarged to take narrow boats.

5.4.16 A number of wooden swing-bridges cross the canals and although these have had their timbers replaced they retain characteristic Worcester & Birmingham 'A' frames, wrought iron strainers, tie bars and ironmongery. They also retain cast iron ball race turn-tables. Swing-bridges in this form are now becoming rare on Britain's canals and the Droitwich examples have a regional waterways heritage value.

5.4.17 The six locks of the Droitwich Junction Canal were constructed with side ponds, which are not found before the 1790s on English canals; the Droitwich Barge Canal significantly does not have them.

5.4.18 A rare technical problem that had to be overcome was that affecting the junction lock between the two canals. This lock was built in the centre of the brine pumping area and suffered repeated subsidence, necessitating two major phases of rebuilding and extending the lock chamber upwards.

5.4.19 Further technical significance relates to the brine pumping and salt industry and its canal-side works, which relied upon the canals for the import of fuel and other raw materials and the export of processed salt.

5.4.20 **Rarity** - The Droitwich Canals are significant in terms of owing their virtual existence to one centuries-old industry and in terms of being constructed, in the case of the Droitwich Barge Canal, with one type of sailing vessel in mind. More specifically, the junction lock between the two canals is a relatively rare example of a lock fitted with 4 sets of gates in order to allow for fluctuations in the level of the River Salwarpe, which feeds the canal at this point. This formation allowed boats to pass in both directions no matter what level the river was at.

5.4.21 **Integrity** - Despite the abandonment of the Droitwich canals in 1939 a significant number of standing structures survive and have been or are being

restored. Salwarpe Bridge has high heritage value and Porter's Mill, Mildenham and Lineacre Bridges exemplify Brindley's bridge building practice to a high degree. Stone copings retain tool marks and rope marks.

5.4.22 Locks on both canals present a phased mix of materials, with earlier red brick and stone giving way to later engineering bricks and fired clay copings. The locks on the Junction Canal survive with more of their original 1850s material undisturbed. Side weirs and overflows survive and an embankment and a substantial cutting take the canal through Salwarpe village; these earthworks are significant survivals. Both canals retain early stone copings to their waterway walls.

- **Gauge and Profile**

5.4.23 A plan of 1909 profiles, prepared for Sharpness New Docks, Gloucester & Birmingham Navigation Company shows the Junction Canal has an overall beam of 35ft and draught of 4ft 6in, and Droitwich Canal (ie Barge Canal) has a beam of 50ft and draught of 5ft. Whilst the significance of the Barge Canal is recognised by the Partnership, restoration is proposed principally for use by narrowboats, creating the 21-mile cruising ring.

5.4.24 Restoration to original profile on the Barge Canal is not possible as part of this restoration due to limitations on costs and the considerable environmental impacts that would arise through the clearance of much larger areas of reedbeds. The reed fringes that have established since abandonment are key features in terms of biodiversity (see above).

- **Archive Research**

5.4.25 An archaeological desktop assessment of the Droitwich Canals was undertaken by Worcestershire County Council in late 2002. The aims of the assessment were as follows:-

  - To collect relevant information relating to the archaeological potential of the proposed development area;
  - To assess the potential significance of any archaeological remains and historic structures;
  - To assess the potential impact of the proposed development and the new cut on these archaeological remains and historic structures; and
  - To recommend mitigation measures to offset detrimental effects of the development

5.4.26 The study area was defined as a corridor extending 500m to either side of the line of the Canals (23km in length) which was considered to encompass all proposed development and be sufficient to allow

characterisation of the general area. The study area includes the historic core of Droitwich Spa where there are many archaeological records.

- **Archaeology and Historic Environment**

Landscape Features

5.4.27 The Canals run through a series of period landscapes which is relatively little understood from prehistory to the early medieval period. Aside from the remains of former settlements that are known from the area and others which have yet to be found, alluvium contains valuable environmental indicators. At Impney Farm it is possible that pollen evidence will challenge current views of the mesolithic period. Though the evidence has still to be verified, any sites of this period are rare on a national basis. The environmental evidence from Impney Farm and areas containing mesolithic flint indicate activity in the vicinity of Droitwich Spa, but such sites are particularly difficult to find. Such sites will typically consist of flint artefacts within the ploughsoil, often the artefact densities are quite high but can also occur over a relatively small area. The heavy clay soils do not facilitate the use of sieved test pits, and fieldwalking is really the only effective method of prospection. Whereas it may be considered a reasonable assumption that the probability of a mesolithic site existing within the area of the new canal might be low, the available evidence of activity in the area generally, and the high importance of mesolithic sites, makes this possibility a material consideration.

Prehistoric Features

5.4.28 The earliest excavated features associated with salt production in Droitwich Spa date from the middle Iron Age and the late Iron Age. Briquetage (crude ceramic vessels used in salt production and originating from the town) has, however, been found on sites in the region dating to the 6th and 5th centuries BC. The late Iron Age evidence consists of large clay and timber lined tanks and hearths found on two excavations (the Old Bowling Green and Friar Street) and further Iron Age evidence is likely to be found over a considerable area to the south of the river.

5.4.29 A mesolithic site has been identified at Bays Meadow, and neolithic and Bronze Age activity has been noted elsewhere in the town. No direct association with use of the natural brine springs or salt production has been made for these early sites. Were such evidence to be found, however, then this would have considerable importance.

5.4.30 Within the vicinity of the Canals outside Droitwich Spa there are a number of sites of prehistoric date, but these are unlikely to be representative of the real density of prehistoric sites. Of particular note is the evidence for mesolithic activity from alluvial areas such as from Impney Farm. At Impney Farm pollen of mesolithic date appears to show little sign of wildwood and a relatively open environment, including evidence of cereals. These results challenge the traditional view that this area was heavily forested throughout the prehistoric period.

Roman Features

5.4.31 Salt continued to be produced during the Roman period though there is evidence that the location and nature of the industry changed at various times. Secondary industries are likely to have also developed such as using the salt for the preservation of meat, tanning etc. The Canals run through this area of industrial activity, and excavations on a new stretch of canal to the north of the Saltway at Upwich discovered an impressive timber structure associated with the extraction of brine.

5.4.32 Roman settlement occurred in the area of Hanbury Road and Friar Street and a cemetery is known from various sites along the present Vines Lane, just to the north of the river. The present A38 follows the course of a Roman road, the line of which is crossed by the Junction Canal. The Junction Canal also follows a Roman road running from Droitwich to Alcester, and this line forms a strong feature of the landscape from this period. It was a common Roman practice to place burials flanking roads just outside of towns and there is a potential for burials on the Texaco Garage site. A 1st century AD Roman fort was constructed on Dodderhill and later a sumptuous villa was established at Bays Meadow and this probably housed the Emperor's appointed official for the salt industry. Both of these sites lie well to the north of the Canals.

5.4.33 The land use and settlement pattern of the later prehistoric period would have continued throughout the Roman period, and again woodland may be assumed to be managed to provide fuel for the Droitwich salt industry. The heavy soils derived from the Mercian Mudstone are not conducive to the discovery of sites and it is likely that the existing evidence for prehistoric and Roman settlement is under representative. Whereas two common methods of locating sites (cropmarks and use of a magnetometer) are not generally successful in this area, sites can be found by fieldwalking and close examination of groundworks.

5.4.34 It is speculated that the use of the River Salwarpe for the export of salt dates from the Roman period though there is as yet no direct evidence. An impressive Romanised farmstead has been recently excavated in Hampton Lovett, some 1km to the north of the Barge Canal. A Roman road is suggested to have run westwards from Droitwich and may have crossed the line of the Barge Canal around SO 889 635.

Post-Roman to Early Medieval Features

5.4.35 One of the most significant aspects of Droitwich's archaeology is the survival of well preserved deposits of this period within the alluvial floodplain in the Vines Park area. Excavation at Upwich recorded salt making activity from the middle 5th to early 7th centuries sealed by a distinctive alluvial silty clay. The excavation occurred due to the construction of a new section of canal and periodic visits to the canal works elsewhere identified similar horizons for the whole area between Upwich and the new basin. Pottery of this period was also retrieved. Such is the importance of Droitwich in the pre-

Conquest period that it is one of the most mentioned places in the Domesday Book.

5.4.36 It is from this time that the first tangible evidence for the management of woodland to supply fuel dates. There are early charters referring to salt rights in Droitwich, and a number concern the supply of fuel specifically for the furnaces. Sites of this period are notoriously difficult to find and again existing evidence is very likely to be under representative.

Medieval Features

5.4.37 The importance of Droitwich Spa and its salt industry continued throughout the medieval period with well preserved buried remains supported by a wealth of documentary material. The residential and commercial area of the town centred on High Street and Friar Street to the south of the Canals, with the industrial focus remaining to the north. By far the greatest extraction of brine occurred at the Upwich Pit and this has been subject to excavation. The site of the Pit (or well) remains, as does much of its buried structure, and is marked in Vines Park, next to the canal. Brine extraction also occurred at Middlewich and Netherwich. The Middlewich pits went out of use c1477, but are likely to be the structures observed during construction of the new basin, with their lower parts surviving in the canal bed. The area around Vines Park and Netherwich also includes potential medieval buildings fronting what is now Hampton Road which are shown on later maps but which are likely to have medieval origins. Also in its vicinity (but probably to the south and west) lies the site of St Nicholas' Priory.

5.4.38 The present B4065 road bridge (Chapel Bridge) over the River Salwarpe is on the site of a medieval bridge which included a chapel through which the road ran. The engraving from Blewitt and Field also shows a building just to the south-west of the bridge and this is shown as having a close studded timber frame which would make it a medieval building but there is no evidence of the building being a chapel. The 17th century map, however, does show a chapel, immediately south-west of the bridge. There is, therefore, a conflict between the documentary evidence (a contemporary account stating the chapel spanned the highway and the engraving) and the map which has proved reliable elsewhere. The map also shows buildings fronting the main road in the area of the Saab Garage and these may well have medieval origins. A linear area of subsidence runs through the town and the Saab Garage area is likely to lie within it. The nearby lock has been repaired several times due to subsidence, and archaeological trenches in the vicinity have shown that earlier deposits lie at a greater depth.

5.4.39 The Texaco Garage site includes the Town Mill. The site was also previously known as Frogmill and Kings Mill, and has medieval documentary evidence and was originally part of Dodderhill parish.

5.4.40 The present day general landscape of irregular smaller fields with isolated woods would have developed through the medieval period. Though amalgamation of fields has occurred the general historic field pattern can still be seen. This field pattern of characteristic small irregular fields is indicative of

early woodland where enclosure has taken place throughout the medieval period. There would have been some of the open fields systems, common elsewhere in the country, but these would have been concentrated on the villages (ie Salwarpe). There is no detailed study of the field system for this area. A few areas of ridge and furrow survive at various places alongside the Canals and in the elongated reverse-S shape of some of the present field boundaries.

5.4.41 The Barge Canal passes though the village of Salwarpe which retains some of its medieval character in its buildings, especially the church and Salwarpe Court. There are many mills on the River Salwarpe, some of which are medieval in date and many of the features associated with them can still be seen (ponds, leats etc). A deer park has also been identified at Salwarpe and the Barge Canal cuts through the recorded location.

Post-medieval and Modern Features

5.4.42 The canals were constructed during this period and a chronology of events is summarised below.

5.4.43 The Barge Canal was built by James Brindley, who's previous project was the Staffordshire and Worcestershire Canal. He was assisted by Robert Whitworth, John Priddey (resident engineer), John Bushel (contractor) and used a local labour force. Its main cargoes were coal and salt but also agricultural produce and bricks.

5.4.44 The Junction Canal was constructed by James Boddington (engineer for Worcester to Birmingham Canal). The Barge Canal Locks were also lengthened at this time.

5.4.45 With the ending of the Borough monopoly in 1695, salt production rapidly increased and the disuse of the Corporation's Upwich Pit has been linked to the coming of the Barge Canal. Throughout the 19th century the Vines Park area of Droitwich and beyond was occupied by numerous salt works producing salt by the 'open pan' method (large shallow iron pan in which the brine was heated, the water evaporating allowing salt crystals to be skimmed off, placed in moulds and dried). Much of the salt was exported and large quantities of coal were needed for the furnaces.

5.4.46 The River Salwarpe had been used for transport in earlier times (see above) but before the Barge Canal was built there were several attempts to make it navigable. Flash locks constructed by Lord Windsor (five) in 1660 perhaps completing works started in 1655 by Yarranton on the River Salwarpe. The locations of these locks is not recorded within the County's Heritage and Environment Record (HER) though earthwork remains are known.

Conclusions

5.4.47 Restoration of the Canals and the construction of a new cut will entail activities which will have a physical impact on archaeological sites. These activities include the creation of reed beds, temporary access and haul routes, dumping of fills from the old channel, site compounds, and cutting of the new channel. An assessment of the impact of activities will be undertaken on a site by site basis and may lead to recommendations for further evaluation or a watching brief.

5.4.48 The new line of the canal will entail disturbance of the alluviated area associated with the Body Brook to the west of the Hanbury Locks. This is likely to contain environmental indicators of former landscapes, associated to a greater or lesser extent with human activity. Outside of the alluviated areas, the new line of the canal could encounter sites of any period but of particular interest would be sites of mesolithic date.

5.4.49 A chronology of events for the Canals is provided in Table 1.

Table 1 - *Chronology of events for the Canals*

Date	Event
1768	January, Act to build Droitwich Canal passed. Lock size 64' by 14' 6".
1768	June, work started
1769	First recorded use of roller bearing turntables for swing bridges made by Dale Foundry Dalebrook, Ironbridge
1770	Strike by labourers at Ladywood lock complaining of harsh conditions
1771	March, Canal opens
1791	W&B Canal act passed. Droitwich Company guaranteed share value.
1806	Towing path created for use of horses
1810	W&B took over management of Droitwich Canal
1812	First Wich Barge
1821	W&B ceased to manage Droitwich Canal
1841	Birmingham & Gloucester railway opened
1852	Act to build Droitwich Junction Canal passed
1853	Junction Canal opens (including construction of the "Barge" lock)
1853	W&B leased Droitwich Canal
1854	Barge Canal locks lengthened 71' 6"
1874	SND took over W&B canal and thus also Droitwich Barge and Junction Canals.
1875 - 1876	SND carrying out improvement works to it's new acquisitions including repairs to the Barge lock affected by subsidence
1918	Last trade on Barge Canal
1928	Last trade on Junction Canal
1939	Droitwich Canals Act of Abandonment
1968	Clearance work on barge canal by volunteers started
1973	Droitwich Canals Trust formed
1854	Droitwich canal locks lengthened

W&B = Worcester & Birmingham canal Company.
SND = Sharpness New Docks & Gloucester & Birmingham Navigation Company
Droitwich Canal – also known as the "Barge Canal"

5.5 Sense of Place

5.5.1 Sense of Place is about the relationship of people to their local environment and the extent to which they can recognise it. It focuses particularly on those features or local connections that make a place distinctive from other places. Developing a sense of place requires people to take 'ownership' of an area and to be actively involved in its upkeep. The issues of ecology, landscape, archaeology, built heritage and human activity outlined above, are key elements which contribute towards a sense of place.

5.5.2 The public consultation workshop and other consultations undertaken clearly showed that local people have a strong sense of place in relation to the Droitwich Canals. The common factor is that the Droitwich Canals still exerts influence, even though it may be hidden in some areas, on the present environment. Many are aware of the valuable environment on their doorstep and of its history, and are keen to be actively involved. The canal restoration provides a good opportunity to create a new sense of place.

5.5.3 Unique features such as the salt trade or local historic events, for example, can provide ideal topics for developing interpretation facilities along the Canals.

5.6 Recreation and Access

5.6.1 A Tourism and Visitor Management Plan (TVMP) has been developed for the restored canals. This plan includes issues such as access, car parking, moorings, angling, cycling etc. An Access Audit has been undertaken as part of the Tourism and Visitor Management Plan. The TVMP includes a series of maps which show the key features and the key opportunities from a recreation and access point of view.

5.6.2 The TVMP compliments the Worcestershire Countryside Access and Recreation Strategy, being prepared by Worcestershire County Council, and takes into account new access opportunities that may be provided following the Countryside and Rights of Way Act 2000.

5.6.3 The TVMP identifies opportunities to incorporate Access for All standards into the future management of the Canals. This includes access to information as well as physical access.

5.6.4. The TVMP proposes the development of a hierarchy of access points. The hierarchy has been developed based on landscape, and other environmental factors and is a management tool for directing visitors to robust sites which have good facilities.

5.6.5. Primary Gateway sites are proposed at Hanbury, Vines Park and Hawford Mill. They will include good access, parking, interpretation and picnic areas, Secondary Gateway sites are proposed at Porters Mill and Chawson. Local Access Points are proposed at Swan Drive, Salwarpe Road, Valley Way

Bridge, Salwarpe Village, Ladywood, Mildenham Bridge and Hawford Lock Lane. They may not include any parking and will be unpromoted and therefore for local usage only.

5.6.6. The TVMP proposes 3 types of towpath which relate to the Gateways sites as follows:

- Level grass path between Hawford and Porters Mill and between Ladywood and the A38.
- Compacted stone path between Porters MIll and Ladywood and between the A38 and Vines Park and between Vines Park and Hanbury
- Sealed surface path in Vines Park

5.6.7. All the proposals in the TVMP will be subject to environmental appraisal through the formal EIA process.

- **Angling**

5.6.8 Angling is an important activity along the canals, with 4 clubs using them. The management of fishing rights will need to be reviewed as part of the restoration process and subsequent management by British Waterways.

5.6.9 Generally angling will be encouraged on sections of the towpath which do not have cycling on.

- **Walking**

5.6.10 Walking is one of the most popular activities along the canal corridor. There are many links to the rights of way network and the towpath is designated as a right of way between the A38 and Hawford. Rights of way linking to the Canals include both footpaths and bridleways.

5.6.11 The Canals and their linked paths provide opportunities for the development of circular walks, which connect the Canals to adjacent residential areas and other visitor attractions

5.6.12 The Canal currently links with a number of waymarked walking trails such as the Wychavon Way which links the Cotswolds Way at Winchcombe to the River Severn at Holt Fleet, a distance of 42 miles.

5.6.13 The canal towpath is very popular for local walks, but, through consultation, we have identified public concern over dog mess in places.

- **Cycling**

5.6.14 Cycle access to the canals is currently fairly limited due to the nature of the towpath.

5.6.15 The proposed National Cycle Network route 45 runs through Droitwich and the canal towpath could be improved to form part of this route. However the towpath is a designated footpath from the A38 westwards and any use for cycling might require a formal Cycle Tracks Order. This area is also recognised for its environmental value and any urbanisation of the towpath would require careful consideration. The priority area for cycling is therefore likely to be between Hanbury and the western edge of Droitwich Spa, which will link Droitwich to the Worcester & Birmingham Canal.

5.6.16 The development of cycling will require the development of towpaths for cycle use, whether formal as part of a Sustrans route or informal, providing for off-road cycling. There is potential for conflict with walkers and anglers.

5.6.17 There are currently no promoted circular cycle routes linking to the Canals. There are opportunities to develop routes linking to population centres, such as Worcester, and public transport interchanges.

- **Horse riding**

5.6.18 There are a number of bridleways linking to the Canals and stable facilities at Hadley and close to Ladywood. The narrow lanes around the Canals are also used by horse riders. The towpaths do not have bridleway status.

5.6.19 There is some concern, expressed through the public consultation, from other users of potential damage to the towpath from equestrian use, and user conflicts. This is consistent with British Waterways' national policy which does not normally allow horse riding on the towpath.

5.6.20 Access for horse riding is addressed through the TVMP and the opportunity to designate some of the adjacent lanes as Quiet Lanes is proposed.

- **Boating**

5.6.21 Boating on the Canals is currently limited to one trip boat operating on the Barge Canal. Boating following restoration will mainly be for leisure use, but there is some potential in the future to consider limited freight use if wharf facilities are re-instated. One of the major benefits of restoration will be the creation of a 21-mile cruising ring, linking with Worcester via the Worcester and Birmingham Canal at the eastern end and the River Severn at the western end. This will be particularly significant as it provides a unique cruising ring that can be completed in a weekend or short break. It will provide a major promotional feature for the Canals and the area.

5.6.22 The restoration of the Canals will enable the development of new mooring facilities, including both visitor and long term mooring. This will provide an income to contribute to the subsequent management of the Canals. Careful planning of mooring locations will be required, and it is

proposed that a marina is developed to provide moorings of up to 100 boats. There is scope to develop a market for trip boats on the Canals.

5.6.23 Slipways allow small and medium sized visiting boats to gain access to canals cheaply and easily. Consideration will be given to providing a slipway on the new section of canal between the M5 and Hanbury or at the planned new Hanbury marina.

- **Canoeing**

5.6.24 Canals are highly suitable for canoeing, being particularly safe for young people and less experienced canoeists due to the lack of current. There are currently no canoeing facilities in the town. The Droitwich Leisure Centre is located right next to the canal and close to local schools and provides an excellent opportunity for a Canoe Club base as the Leisure Centre pool and changing facilities could be used. The Leisure Centre is also located on a long pound (between locks) however a small slipway would be required to enable beginners to access the canal.

- **Traffic**

5.6.25 Traffic management is a key issue if more visitors are encouraged to use the Canals. The nature of the narrow lanes adjacent to the Canals require careful consideration of car parking, both in relation to location and number of spaces provided.

5.6.26 To assist in reducing the number of cars, full consideration needs to be given to providing access by other means of transport and cycle and footpath links from the surrounding area. The public meeting considered that opportunities for bus services were limited by the nature of the lanes. These issues are addressed in the TVMP

5.7 Value to the Local Economy

- **Economy**

5.7.1 The improvement of the local environment along the canal corridor will make the area more attractive from a tourism point of view and provide a quality environment for new businesses. Some will be waterway-related businesses whilst others will benefit from a waterside location.

5.7.2 Economic benefits from the restoration have been assessed and reported in detail as part of the project submissions to the Heritage Lottery Fund and Advantage West Midlands. The main benefits to be gained from improved management of the environment and heritage are safeguarded and new jobs, new businesses, increased visitor numbers and increased expenditure in the local economy.

The principal targets are as follows:-

- Creation of 87 new jobs (fte).
- Development of 20 hire, 5 day, 3 trip and 1 restaurant boats.
- Increase cruising expenditure on Worcestershire Canals by £282,000.
- Increase visitor days by 330,000 per year.
- Increase tourism and recreation expenditure by £2.45m per year.
- Develop moorings for 100 new permanently moored private boats.
- Create 11 new jobs (fte) on other Worcestershire Canals.

5.7.3 The restoration of the Canals to navigation will provide the opportunity for quality new developments for housing, leisure and business use at a number of sites along the canal corridor. The 'Droitwich Canals Supplementary Planning Guidance' identified the main opportunities to be at the following locations:-

- Hanbury Locks
- Texaco Garage
- Saab Garage
- Netherwich Basin and Vines Park
- Chawson Valley
- Ladywood
- Porters Mill

However through public consultation concerns over moorings, parking and facilities at Ladywood were raised and it has been decided to omit this site from the Supplementary Planning Guidance.

5.7.4 As well as direct benefits along the canal corridor, it is anticipated that there will be induced economic benefits for the surrounding area, including other waterways and visitor attractions.

- **Agricultural Businesses**

5.7.5 The restoration of the Droitwich Canals provides an opportunity for farm diversification along the canal corridor. This could include the provision of visitor facilities or accommodation. Funding for such schemes may be available from the Department of the Environment, Food and Rural Affairs (DEFRA) through the Rural Development Programme.

5.7.6 Within the area adjacent to the canal corridor there may be opportunities to manage land for the benefit of the environment under the Countryside Stewardship Scheme (and the Entry Level and Higher Level Schemes from 2005). Schemes could include, for example, the reversion of

arable land to pasture, new wetlands or restoration of hedgerows and hedgerow trees.

5.7.7 The creation of new wetlands in this area can be assisted by working with the Severn and Avon Vales Wetlands Partnership.

5.8 Value to the Local Community

5.8.1 Public consultation has demonstrated the commitment of local people to the Droitwich Canals and particularly the value they place on them as an environmental and heritage asset. Many people are already engaged in voluntary work, such as practical work, interpretation, education and fund-raising, to improve the canal environment and it is hoped that the restoration and the creation of a voluntary ranger service will strengthen volunteer opportunities. Involvement in canal projects provides an opportunity to improve community cohesion, to develop new skills and to develop a sense of pride in the area.

5.8.2 Key issues from the consultations included linking the canals to the town centre and providing an improved link between town and country.

5.8.3 It is important that the development and management of the canals and their corridor is co-ordinated with other initiatives in the area, such as the Town Healthcheck for Droitwich Spa.

5.9 Education and Training

5.9.1 The Canals currently provide an important educational resource for schools and for lifelong learning. There is scope to develop the canals and their links with the River Severn and the Worcester and Birmingham Canal as an educational resource. The restoration process provides an additional education focus. Education is being addressed in more detail in the Education and Interpretation Plans for the Canals.

5.9.2 The Canals will be able to contribute to the incorporation of sustainable development into the National Curriculum, through the teaching of, for example, science, geography, history, art or citizenship. There are 5 schools within 10 minutes walking distance of the canals providing the opportunity to develop strong links between these schools and the restoration project.

5.9.3 There is currently considerable involvement of volunteers in the management of the Canals, particularly through the Droitwich Canals Trust. There is scope to develop this and British Waterways is developing a Volunteers Programme to identify potential volunteer projects.

5.9.4 Voluntary work provides an ideal opportunity for developing traditional skills through a programme of training. There is scope to link this with the

current British Waterways Heritage Skills Programme and the Training & Volunteer Plan considers how this might be achieved.

5.10 Health and Human Welfare

- **Tranquillity**

5.10.1 The Canals are currently important, particularly in the rural areas, in that they provide areas of relative tranquillity. In planning the restoration of the Canals, full consideration will need to be given to noise levels, both during and after restoration.

- **Healthy Walking**

5.10.2 There is currently a healthy walking initiative based at the Droitwich Leisure Centre. This seeks to encourage people to build healthy exercise into their normal routine. There is scope to further develop such initiatives along the canal corridor.

- **Climate Change**

5.10.3 Climate change is a key issue facing the world's environment. The impact of the Droitwich Canals is fairly minor. Increasing the area covered by vegetation, and particularly trees and hedgerows, may make a minor contribution to carbon fixing and hence a reduction in carbon dioxide in the atmosphere. Car use is a cause of climate change and therefore the extent to which car use is encouraged needs to be carefully planned and alternative modes of transport encouraged where possible.

5.10.4 Climate change may potentially impact on the canals by reducing the availability of water resources in hotter summers, and in extending the likely holiday season if temperatures increase. The increased frequency and severity of flooding will need to be carefully managed.

- **Air Quality**

5.10.5 Local air quality is good and any detrimental impacts through, for example increased traffic, will need to be minimised.

- **Safety**

5.10.6 Safety is a key consideration in planning the management of the Canals and encouraging an increase in visitor use. Particular concerns were raised at the Community Workshop about the absence of railings at certain potentially hazardous locations and the absence of lighting in urban areas.

5.10.7 Risks will need to be fully assessed during the design process, in accordance with the Construction, Design and Management (CDM) Regulations.

5.10.8 It is proposed that a Visitor Safety Plan will be developed which uses the Visitor Safety in the Countryside Group publication, “Managing Visitor Safety in the Countryside”, as a guide.

6. KEY VULNERABILITIES AND OPPORTUNITIES

6.1 The Quality Of Life Capital Methodology

6.1.1 The Quality of Life Capital methodology has been developed by the Countryside Agency, English Nature, English Heritage and the Environment Agency. It seeks to provide a consistent and integrated approach to manage projects to benefit quality of life, by incorporating environmental, social and economic benefits.

6.1.2 This approach, which was piloted as 'Environmental Capital' has not been applied to a waterway project before. It is an innovative approach that seeks to identify all the benefits and services provided by aspects of the canal and its corridor and to identify policies and key actions to improve those benefits. It also seeks to provide a method for assessing the relative importance of those benefits with the intention of reducing policies which may contradict each other. It also seeks to find a way of incorporating technical and scientific issues and subjective and social issues into a single framework.

6.1.3 The table in Appendix 4 summarises the assessment process undertaken. Ten categories of benefits were selected, which represent key aspects of sustainable development.

6.1.4 The benefits and key features were identified through research undertaken and through consultation with key organisations and local people. The question was then asked as to at what scale that benefit was important, either local, regional, national or international. The next question asked whether there was enough of that benefit and whether the current trend was upwards, neutral or downwards. A key way of assessing how important a benefit is is to consider whether it could be substituted elsewhere, either by re-creation of the same feature or an alternative feature that provides the same benefit.

6.1.5 As a result of the assessment above, a number of key vulnerabilities and opportunities were identified and these are set out below. These vulnerabilities and opportunities have formed the basis for the key actions and policies that have been recommended. Where these are actions to be undertaken as part of the restoration they have been grouped under an overarching policy statement in the section below.

6.2 Key Vulnerabilities

6.2.1 **A Quality Local Environment**

- There is a risk that water quality in the Droitwich Canals and the River Salwarpe could deteriorate unless the likely impacts are carefully investigated and mitigation measures incorporated.

- There are potential impacts on groundwater, particularly as a result of contaminated land.

- There are potential impacts on land and soils, particularly as a result of dredging works and disposal.

- There is a need to ensure supplies of water to the Canals, to reduce incidences of flooding of land and property from the Canals, and to manage potential impacts on other waterways through abstraction to supply the Canals.

6.2.2 **Biodiversity**

- Populations of key species that contribute to national and local biodiversity could be impacted unless restoration and long-term management of the Canals is carefully planned and any impacts are mitigated.

- Key wildlife habitats that contribute to national and local biodiversity could be impacted unless restoration and long-term management of the Canals is carefully planned and any impacts are mitigated.

- There could be a major impact on breeding bird populations unless the new reedbeds are fully established and being used by birds prior to the removal of reeds from the channel.

- The wildlife corridor along the Canals needs to be considered to maintain the linkages between wildlife habitats in the long-term and facilitate the movement of species.

- There are a number of locally designated wildlife sites along the canal corridor.

6.2.3 **Landscape and Amenity**

- There is a risk of detrimental changes to landscape character unless restoration and long-term management of the Canals are carefully planned.

- There is a risk that landscape issues on the canal could be considered in isolation from the surrounding area and have an adverse impact on landscape character.

- Works on restoration and long-term management of the Canals could have a significant impact on the local landscape unless a visual assessment is undertaken to identify likely impacts on visual amenity and put in place mitigation measures.

- The local landscape character of the canal corridor could be eroded unless the restoration considers the individual character of the 8 Character Areas and work undertaken is appropriate to maintaining and enhancing this character. Issues to include towpath and boundary treatments; views; tree and woodland management; tranquillity and historic character.

6.2.4 **Historical Character and Archaeological Features**

- There are a number of areas and features designated for their historic or archaeological value, including the Droitwich Canals Conservation Area and the Vines Park Scheduled Ancient Monument, which could be impacted unless work is carefully planned and mitigation measures are incorporated.

- Canal-related heritage features, and particularly the original Brindley bridges and locks, are at risk if not conserved and enhanced, and if inappropriate conservation techniques are used.

- There is a risk that key heritage features along the canal corridor will not be identified, recorded and protected if the works are not carefully planned.

- Evidence of historic landscapes, particularly in alluvial areas, may be lost if not recorded and preserved.

- Waterlogged archaeological deposits associated with the salt industry are vulnerable to damage through canal works, particularly in the Vines Park area. (English Heritage ‘Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood’ to be followed).

- The availability of skills competency for maintenance and repair of historic structures needs to be fully addressed if the standard of workmanship is to be on an appropriate standard (see BW Heritage Principles in Appendix 1)

6.2.5 **Recreation and Access**

- There is a risk that if visitor numbers are not kept to sustainable levels there could be detrimental impacts, for example, on biodiversity, landscape character, tranquillity or local communities.

- There is a risk that if recreation is not appropriately managed the experience of visitors could be diminished.

- There is a risk of conflict between different users of the canal corridor if recreational use is not properly zoned.

6.3 Key Opportunities

6.3.1 **Biodiversity and Landscape**

- There is an opportunity for biodiversity and landscape gain through working in partnership with other organisations and linking with agri-environment schemes to improve the wider corridor and local linkages.

- The restoration scheme can contribute to the achievement of existing UK and Local Biodiversity Action Plan targets, such as through the net gain in the area of reed beds along the canal corridor.

- The Canals provide the opportunity to set up an effective programme of landscape and biodiversity management based on sustainability principles. Also the canals will generate the income to ensure that this management continues in the long term.

- A Biodiversity Action Plan for the Canals will be produced as part of the restoration project.

6.3.2 **Sense of Place**

- There is an opportunity to work with local communities to both retain and celebrate their existing sense of place and to develop a new sense of place and ownership of the restored canals and their corridor.

- There is an opportunity to identify, enhance and promote those features that are locally distinctive to the Droitwich Canals and this part of Worcestershire.

- Interpretation can promote the historic significance of the canal corridor and connections with famous people or events.

- Public arts programmes can be developed along the canal corridor to help develop a new sense of place.

- There is an opportunity to develop oral history projects to maintain a record of the history of the canals.

6.3.3 **Recreation and Access**

- Access to the canal has been planned in a strategic manner through the development of the Tourism and Visitor Management Plan and Marketing Plan, which address Access for All and social inclusion.

- All rights of way in the project area can be made more usable where necessary.

- The Canals and the surrounding area can be managed to provide new and improved opportunities for walking.

- The Canals and the surrounding area can be managed to provide new and improved opportunities for cycling.

- The Canals can be managed to provide high quality facilities for boating including a 21-mile cruising ring linking Droitwich to Worcester.

- There is a major opportunity to develop a linear park incorporating recreation features for a wide variety of users, including anglers, canoeists etc. A number of activities will result directly from aspects of the heritage of the linear park eg bird watching, guided walks.

- The canal could contribute to the development of additional sustainable transport initiatives in the area.

- Interpretation facilities can be provided throughout the linear park to improve visitor experience and raise awareness and understanding of the canals' heritage value.

- Canal towpaths can contribute to the local landscape character and local wildlife habitats.

- Information can be collected on visitor use of the linear park, both before and after restoration to inform management decisions.

6.3.4 **Value to the Local Economy**

- Canal-based tourism can encourage the creation of new tourism-related job opportunities and the safeguarding of existing jobs.

- The Partnership can encourage the development of new businesses along the canal corridor through the restoration of the canal and improved infrastructure.

- The environment and heritage of the Droitwich Canals can be used as a promotional tool to encourage increased tourism investment in the area and an increase in visitor spending.

- The Canals can be managed so as to improve the financial benefits to the owner/operator for ongoing management of the Canals and linear park.

- The Partnership can identify and implement new development projects to enhance the built environment adjacent to the Canals.

- Canals can provide benefits to the regional economy by linking the promotion of the Canals with other waterways and tourism facilities.

- The canals can provide benefits to local agricultural businesses by providing new opportunities for farm diversification.

6.3.5 **Value to the Local Community**

- There is scope to provide a range of opportunities for local people to become actively involved in the management of the Canals.

- The Canals can improve the quality of life of local people and develop an improved sense of community.

- The Canals can be linked to other initiatives in the local area.

- The Partnership can respond to the views of local people both before restoration and in the long term management of the canal corridor.

6.3.6 **Education and Training**

- The Canals can provide an educational resource for both schools and lifelong learning.

- The Canals can provide improved access to wildlife as an educational resource.

- Heritage skills can be developed through encouraging active volunteer involvement in the management of the Canals and providing training programmes.

- The Canals can provide a range of new opportunities for training in areas such as marketing and new business creation, including academic as well as manual work. The canals can form a linear ‘training studio’.

6.3.7 **Health and Human Welfare**

- The Canals and surrounding countryside can continue to provide areas of tranquillity for use by local people and visitors.

- The Canals and surrounding countryside can provide a location for healthy exercise.

- The management and development of the Canals can make a positive, although minor, contribution to carbon fixing and reducing climate change.

- Management and development of the Canals can incorporate features to improve the safety of canal users where particular hazards have been identified.

7. POLICIES AND KEY ACTIONS

7.1 Introduction

7.1.1 This section outlines the key policies and actions. The key policies will be relevant during the restoration phase and beyond, but the associated actions may only relate to the restoration process. Each policy addresses either a key vulnerability or opportunity, as identified in the previous section.

7.1.2 The policies identify opportunities for the Partnership to develop and improve the Canals and their corridor. Their implementation will be pursued wherever possible and will be within the constraints of funding available, impacts on the significant features outlined in Chapter 5, and the responsibilities of the key partners and other organisations.

7.1.3 There will be situations where there is conflict between policies. These issues will need to be addressed on a case by case basis and a final decision will need to be made by the Partnership.

A) A Quality Local Environment

A1 Water quality in the Droitwich Canals and connecting watercourses will be maintained, in conjunction with the Environment Agency, and any likely impacts will be carefully investigated and mitigation measures incorporated.

A1.1 Where pollution risks exists from direct, indirect and diffuses sources, the Environment Agency and British Waterways will work together to investigate and resolve these issues.

A1.2 Seek to address, with the Environment Agency, issues of diffuse pollution through an awareness campaign for local farmers and landowners. Consider also a total catchment management plan approach.

A1.3 A full assessment of impacts of re-profiling the River Salwarpe will be carried out as part of the EIA prior to any work being undertaken. This will consider issues such as water quality, water resources, ecology and fisheries.

A1.4 Investigate options to minimise the mixing of water from the Worcester and Birmingham Canal with the River Salwarpe, particularly the likelihood of a pipeline being laid to bypass the river. British Waterways will work with the Environment Agency to quantify and address any quality issues in the Worcester and Birmingham Canal.

A1.5 Further investigation is required into the impact on salinity, and therefore local ecology, of pumping water directly from the Junction Canal into the Barge Canal.

A1.6 Further investigation is required into the impacts on water quality of overflows from the Barge Canal to the River Salwarpe. Management of this needs to be agreed.

A2 The design of any works undertaken will carefully consider potential impacts on groundwater, particularly as a result of contaminated land.

A2.1 Ensure by careful design that any development or canal works in the Mildenham Mill area do not have any adverse impact on the status of the groundwater in the Bromsgrove Sandstone aquifer. Management of the monitoring of this needs to be agreed.

A2.2 As part of the Environmental Impact Assessment process, review the Envirocheck Report, which outlines the current and historical land uses along the edge of the canal and associated development sites, to identify any areas of contaminated land and where there is any risk of mobilisation of contaminants. This will determine whether further site investigation is required.

A3 The design of any works undertaken will carefully consider waste disposal, particularly as a result of dredging works.

A3.1 A Waste Management Strategy will be developed to accompany the Environmental Impact Assessment, and will determine the likely quantity and quality of waste to be managed.

A3.2 Identify, through the EIA locations for the disposal of dredgings to minimise impacts on archaeology, wildlife and agriculture.

A4 The canal water resources will be planned carefully to maximise supply of water to the canal whilst avoiding any increase of flood risk to adjoining property and land within the River Salwarpe catchment.

A4.1 Establish a level of service for water resources to the canals and put in place mitigation measures where necessary to reduce the risk of failure.

A4.2 Identify key locations for water resources monitoring and establish a network of monitoring sites.

A4.3 Review the operation of abstractions from the River Salwarpe downstream of the Barge Canal junction and establish operating guidance to ensure an adequate supply.

A4.4 Establish the flow carrying capacity of the restored canal including improvements to the hydraulic capacity of the Worcester & Birmingham Canal structures within the transfer route from BCN.

A4.5 Carry out a flood risk assessment of the canal as part of the detailed design to quantify the nett benefits and any impacts of the project.

A4.6 Where the River Salwarpe passes very close to the Barge Canal, necessary measures will be take to reduce erosion, using soft engineering techniques wherever possible.

A4.7 Should opportunities arise, consideration should be given to the creation of new wetland areas other than reedbeds through the controlled flooding of land.

B) Biodiversity

B1 In line with AINA and BW policy and the UK and Worcestershire BAPs, a Biodiversity Action Plan (BAP) will be produced for the Droitwich Canals. Some outline policies and objectives are set out below and these will be presented in more detail in the Droitwich Canals BAP.

B2 Populations of key species that contribute to national and local biodiversity will be maintained and enhanced, where possible, in accordance with the UK and Worcestershire Biodiversity Action Plans and within the financial limits of the scheme.

B2.1 Ensure protection of otters by protecting them from disturbance and maintaining water quality and food supply. Provide, where possible through habitat management, opportunities for them to extend their range.

B2.2 Ensure vegetation management is planned to maximise habitat benefits for otters. Identify suitable sites for otter holts, protecting existing ones and creating artificial ones if necessary.

B2.3 Ensure that all existing populations of water voles are identified through new survey work, and protected where possible, and opportunities are provided for them to extend their range.

B2.4 Identify habitats suitable for water voles and ensure that these are sensitively managed. Create new habitat suitable for water voles wherever possible during the implementation of the scheme to compensate for any areas impacted through the restoration of the Canals.

B2.5 Ensure the protection of any populations of great crested newts identified along the canal and ensure that if they need to be moved a licence is obtained from English Nature and, that opportunities are provided for them to extend their range.

B2.6 Ensure that there is sufficient habitat to support and enhance existing populations of great crested newts, including consideration of the creation of new habitats to replace any impacted through the restoration of the Canals.

B2.7 Investigate possible bat roost sites well in advance of any works which might affect bats, in order to allow time for resolution of any licensing or mitigation issues.

B2.8 In developing landscape plans, consider, in conjunction with a bat specialist, opportunities to create new habitat links or feeding areas suitable for bats.

B2.9 Check for badger setts well in advance of any works which might disturb them, in order to allow time for resolution of any licensing issues and full consideration of any animal welfare issues.

B2.10 Where badger setts exist, consider whether any proposed works will isolate them from foraging areas, such as grassland or woodland.

B2.11 Identify key species and populations of birds and time works to avoid any possibility of impacts upon nesting birds.

B2.12 Consider whether specialist survey or advice on reptiles is needed when planning off line developments.

B2.13 Ensure that the distribution and requirements of salt tolerant plants are considered during the preparation of the Environmental Impact Assessment and that appropriate and satisfactory mitigation measures are agreed in advance of any works likely to affect them.

B2.14 Undertake a full survey of tree stock along the canal to identify important trees and to guide any tree works required in order to facilitate the passage of boats.

B2.15 Develop guidelines for the management of dead and veteran trees for incorporation into the EIA process.

B2.16 Potential impacts on fish populations will be identified in the EIA and enhancement features will be incorporated into the detailed design.

B3 Key wildlife habitats that contribute to national and local biodiversity will be maintained and enhanced, where possible, and in accordance with the UK and Worcestershire Biodiversity Action Plans.

B3.1 Protect reed beds during restoration wherever compatible with restoration to navigable standards and ensure any loss is mitigated elsewhere.

B3.2 Create 2.4ha of new reed bed in the Salwarpe area in advance of restoration works to compensate for the area likely to be lost. Ensure that reed warblers are nesting before proceeding with the removal of reed beds from the channel.

B3.3 Create 3.2ha of new reed bed (or other wetland habitats) in the Mildenham Mill area, using, where possible, materials dredged from the canal.

B3.4 In developing new areas of wetland water level management will need to be developed for each site and botanical surveys will need to be undertaken.

B3.5 Complete necessary surveys of the hedgerow stock and develop a management and maintenance plan for the towpath boundaries.

B3.6 Identify opportunities for new hedgerows within the canal corridor and seek partnerships to fund a hedgerow programme for the wider landscape.

B3.7 Retain and expand areas of open water within the canal and adjacent land, where possible, when balanced against the need for restoration.

B3.8 Identify opportunities to work with local landowners to promote the management of woodlands along the canal corridor. Further survey and management prescriptions to be developed through the Management Plan.

B4 The corridor along the Droitwich Canals will be managed as a wildlife corridor, with particular attention given to linkages between wildlife habitats and the movement of species.

B4.1 Ensure the wildlife corridor is retained and links between habitats are enhanced wherever possible and activities are avoided that threaten the continuity of the corridor.

B4.2 Information will be compiled on nuisance species, such as Japanese knotweed, Himalayan balsam and Zander, that may enter the canals following restoration, and management measures will be put in place as necessary.

B4.3 In designing the channel profile and substrate, incorporate features to enhance wildlife habitats along the fringes of the canals.

B4.4 Explore, with the Environment Agency, partnership opportunities to address appropriate land management changes that are sympathetic to enhancing the River Salwarpe and its floodplain.

B5 All nationally designated wildlife sites (SSSIs etc) will be protected and Special Wildlife Sites will be protected to the largest possible extent when balanced against the restoration and operation of the canal. New designations may be considered to ensure future site protection.

B5.1 Identify key wildlife sites that can be designated as Local Nature Reserves (LNRs).

C) Landscape and Amenity

C1 Any works undertaken along the canal corridor will take into account their location within a landscape character area identified in the County Landscape Assessment and will seek wherever possible to enhance the inherent landscape character.

C1.1 Ensure that in considering any change to the landscape the location of the canals within the Mid-Worcestershire Forest landscape character area and the Ombersley Forest or Feckenham Forest landscape character sub-area is fully considered and that the character is retained, and enhanced wherever possible.

C2 Any works undertaken along the canal corridor will take into account the landscape types identified in the County Landscape Assessment and will adopt guidelines to maintain, and where appropriate restore and enhance, the inherent landscape character.

C2.1 In accordance with the County Landscape Character Assessment, the following guidelines will be adopted within the Timbered Farmlands landscape type:-

- Maintain character of hedgerow oaks and enhance age structure. Conserve ancient woodland sites and restock with locally occurring native species
- Encourage the planting of new woodlands, reflecting scale, shape and composition of ancient woodlands, and oak as the major species.
- Conserve and restore tree cover along watercourses and streamlines where appropriate.
- Conserve and restore the pattern and composition of hedgerow

structure through management and replanting.
- Maintain the historic dispersed settlement pattern.

C2.2 In accordance with the County Landscape Character Assessment, the following guidelines will be adopted within the Settled farmlands landscape type:-
- Conserve and enhance the pattern of hedgerows.
- Retain the integrity of the dispersed pattern of settlement.
- Conserve and enhance tree cover along watercourses.
- Enhance patterns of tree cover associated with settlement.
- Seek opportunities to conserve all remaining areas of permanent pasture.

C2.3 In accordance with the County Landscape Character Assessment, the following guidelines will be adopted within the Riverside Meadows landscape type:-
- Seek to retain the unity of the linear form of these landscapes.
- Conserve all existing areas of permanent pasture.
- Seek opportunities to convert arable land back to pasture.
- Conserve and enhance continuous tree cover along hedgelines, ditches and watercourses (although continuous cover is not anticipated along the canal corridor – see C4.3 below).
- Conserve existing wetland habitats and seek opportunities for further wetland habitat creation.
- Avoid building or road construction works.
- Avoid further drainage of waterside meadows.
- Explore opportunities to return to patterns and processes of natural flooding cycles where feasible.

C3 The Canal Partnership will work with other partners to develop initiatives to maintain and enhance the management of landscapes in the area surrounding the Canals, particularly focussing on the strengthening of landscape character.

C3.1 Consider establishing new partnerships and seeking new funding to undertake enhancement to the landscape character of the area surrounding the canals, with particular emphasis on permanent pasture, wetland habitats, tree cover and hedgerows.

C3.2 Consider using the area around the canals as a pilot scheme for ‘Areas Sensitive to Change’ as part of the County Landscape Character Assessment.

C4 All works along the canals will seek to maintain and enhance the existing landscape character of the canal corridor. This will use the 8 Landscape Character Areas identified in the Landscape Character Assessment.

C4.1 All towpath treatments will take account of the landscape character of the area, with a presumption in favour of grass towpaths in rural areas (Area 03) and consideration of accessible surfaced stone or sealed paths in other areas.

C4.2 Where grass towpaths already exist, care will be taken to avoid any damage to surfaces as a result of construction or maintenance works, and where this does occur the towpath will be fully re-instated.

C4.3 The design of all towpaths will include consideration of the retention, enhancement and maintenance of towpath fringes in relation to the landscape character area and local ecology.

C4.4 Boundary treatments, and particularly hedgerows, will be retained wherever possible, but new hedgerow planting along the towpath will be limited in order to retain the open character of much of the canal, the existing landscape diversity along the canal corridor, and views both into and out from the canal. This will require a balance between landscape character, the retention of a wildlife corridor and the visitor experience gained from a more open character.

C4.5 Hedgerow management will be undertaken in accordance with a management plan with traditional laying techniques used where appropriate.

C4.6 A full tree survey and management plan will be produced prior to the commencement of restoration works to ensure any tree works to existing trees are appropriate in terms of landscape, ecology and navigation requirements.

C4.7 Existing pollarded trees will continue to be managed and opportunities will be identified for establish new willow pollards along the canal corridor.

C4.8 Woodland management will seek to retain existing woodlands along the canal corridor and will be the subject of a management plan.

C4.9 There will be a presumption in favour of the use of native species in any landscaping schemes or replacement planting along the canal corridor. An exception will be made in the more formal parkland area around Vines Park.

C4.10 In developing a dredging programme for the canal, landscape character issues will be considered in the identification of areas suitable for the disposal of dredgings. The final profile of dredging disposals should not alter the landscape character of the area.

C4.11 The Canals have a number of areas of wide water, where the width of the canal is greater than normal. These provide variety in the landscape and will be retained wherever possible.

C4.12 The close relationship between the Canals and the River Salwarpe is an important feature of the rural lengths in Character Area 03 and enhancements to habitats and the landscape should be considered, wherever possible, to strengthen these links.

C4.13 The character of the Vines Park area will be enhanced to secure its status as a scheduled ancient monument and provide an improved facility for recreation.

C4.14 Visual impacts and enhancements through landscaping schemes will be fully considered in designing urban regeneration schemes in Droitwich to help reverse urban decline.

C5 All works on the Canals will be subject to a visual assessment to identify likely impacts on visual amenity within the Zone of Visual Influence (ZVI) and on key views into and out from the Canals, and mitigation measures will be put in place.

C5.1 Define a Zone of Visual Influence (ZVI) for the canal, identify sensitive views and viewpoints and develop a method for measuring the level of impacts and identifying mitigation measures.

C5.2 Assess any impacts on the key views of Dodderhill Church and Hadzor Hall and identify mitigation measures.

C5.3 As part of the Environmental Impact Assessment, develop a programme of mitigation measures to address predicted visual impacts of restoration.

D) Historical Character and Archaeological Features

D1 Ensure that all persons involved with maintenance, repair or rebuilding activities are qualified for such tasks.

D1.1 All British Waterways staff, contractors and volunteer group leaders to receive appropriate heritage skills training before working on site.

D1.2 British Waterways and professional codes of conduct to be fully complied with.

D2 Information generated by the Conservation Plan and subsequent development proposals and archaeological works will be archived and made accessible to the public.

D2.1 Relevant drawings, specifications, photographs and archaeological records to be considered for use as interpretative and educational material.

D2.2 Records to be placed in appropriate archive and made available to researchers.

D2.3 Consider establishing a 'Droitwich database' as a management and interpretation tool.

D3 Adopt internationally accepted principles of conservation as well as in-house standards in order to safeguard the historic fabric of the Droitwich Canals.

D3.1 Works to be broadly guided by tenets of the 'Venice Charter' and advice contained in national planning policy guidance PPG 15 and PPG 16.

D3.2 Works to be undertaken in accordance with British Waterways' Heritage Principles and Heritage Standards.

D4 Adopt the principles of 'like for like' and 'minimum intervention' when repairing, maintaining or renewing historic fabric.

D4.1 Decisions affecting historic fabric and need for repair to be based upon thorough understanding of conservation of built heritage and archaeology of the site.

D4.2 Historic walls, fences and boundaries to be retained.

D4.3 Essential repairs and maintenance tasks to be prioritised.

D5 Remove poor quality previous repairs and replace with more sympathetic materials.

D5.1 Due care to be given to question of 'authenticity' and respect for contributions of other periods.

D5.2 Works will be subject to negotiations with statutory authorities.

D6 Consider selective restoration of lost features on historic buildings and structures.

D6.1 Consider reinstatement of lost features of Droitwich Canals heritage in whole or in part.

D6.2 Consider replacement of minor but distinctive features on other historic buildings along canal.

D7 Discreetly datemark and differentiate new work from old when repairs and alterations are carried out.

D7.1 Continue canal tradition of casting the year of construction or repair into brick, stone or iron.

D7.2 Repairs to be in matching materials, but not artificially aged or 'distressed' so as to falsify their purpose and appearance.

D8 Encourage voluntary groups to visit and perform works on the Droitwich Canals.

D8.1 Effective induction and supervision of volunteers to be provided.

D8.2 Management Plan to identify specific tasks, after consultation with voluntary group leaders and Droitwich Canals Trust.

D9 Design of new or replacement signs, lighting and canalside furniture will be simple, robust and in the functional tradition of traditional canal equipment.

D9.1 Replicas and facile imitation of traditional forms to be avoided.

D9.2 Signs or lights to be placed discreetly and special attention to be given to contextual integrity.

D9.3 Designs to be based upon British Waterways Design Manual guidance.

D10 Works on the Canals will take account of the conservation needs of areas and features designated for their historic or archaeological value and incorporate enhancements to these features if appropriate.

D10.1 Detailed features of the Conservation Area relating to the salt trade will be retained in situ where possible.

D10.2 Where the Scheduled Ancient Monument at Vines Park may be affected, work with English Heritage to ensure compliance with statutory requirements.

D10.3 Where a Listed Building is likely to be affected, carry out an assessment of likely impacts and identify suitable mitigation measures.

D11 Key canal-related heritage features will be conserved and enhanced, where appropriate, and where possible made more accessible to the public.

D11.1 Implement recommendations from the Droitwich Canals Heritage Survey, where appropriate, and establish a watching brief on any restoration works, identifying phases and methods of construction. This will include bridges, locks and weirs.

D11.2 Maximise, wherever possible, access to historic bridges as part of local walking networks.

D12 Key heritage features, either known or discovered during works along the canal corridor, will be identified, recorded, protected and, where possible, enhanced and promoted when any works are taking place.

D12.1 All works will be undertaken with reference to the county Heritage and Environment Record (HER) to ensure that the needs of the sites listed are considered during design and implementation of works.

D12.2 Establish a watching brief during works on the new cut and key identified elements of the project, and ensure that historic features are recorded and conserved wherever possible, and establish appropriate mitigation in accordance with the results of the Desk-Based Assessment and planning policy. This will include:-

- Prehistoric features
- Roman features
- Post-Roman to early medieval features
- Medieval features
- Post-medieval and modern features

D12.3 Minimise where possible impacts on sites of known importance, as identified in the Archaeological Desk-Based Assessment, when undertaking construction works, such as landscaping, waste disposal, constructing haul roads and digging borrow pits.

D13 In planning or undertaking any significant works to the Canals where evidence of historic landscapes exists, appropriate works, such as recording and preservation, will be agreed.

D13.1 There is a potential for unrecorded prehistoric sites on the alluvium along the canal length. Appropriate measures will be taken to assess the risk and provide suitable mitigation.

D14 Local vernacular styles used in canal-related structures and surrounding buildings will be retained and enhanced wherever possible and new buildings and features will be designed to respond to these styles.

D14.1 New developments along the canal corridor will be designed to respond to local vernacular building styles and will use locally distinctive materials such as red sandstone or local brick wherever possible. Guidance will be through the Supplementary Planning Guidance.

D14.2 New canal-related structures, such as locks, bridges, weirs etc will be designed to respond to local canal vernacular styles.

D14.3 Wherever possible, existing metalwork will be re-used in the restoration of locks and other control structures and any new metalwork or mooring bollards will seek to follow the existing local styles.

D14.4 Where local built vernacular styles exist along the corridor they should be protected from development that would alter their character.

E) Sense of Place

E1 The Partnership will work with local communities before during and after restoration to seek to reinforce the existing sense of place amongst local residents and to develop a new sense of place and ownership in relation to the new environments created along the Canals and their corridor.

E1.1 Involve local people in the planning process and keep them informed of progress.

E1.2 Work with the local community, both during and after restoration, to undertake local projects.

E1.3 Involve local communities in works to restore the canals and in the establishment of a voluntary ranger service, co-ordinated by an agreed member of the Partnership.

E2 The Partnership will work with others to identify, enhance and promote, where appropriate, those features that are locally distinctive to the Droitwich Canals and this part of Worcestershire.

E2.1 Identify and promote those features that are unique to the Droitwich Canals.

E2.2 Develop interpretation of the salt trade in Droitwich Spa, which is essential in maintaining the local distinctiveness of the town.

E2.3 Identify those key features that are distinctive to the Droitwich Canals and develop interpretation to raise awareness of heritage issues.

E2.4 Link the canal restoration to local features of importance, where appropriate, through walking routes and interpretation facilities.

E2.5 Consider the establishment, in association with the proposed new mixed use developments, of a local Information Centre or Museum to celebrate the Droitwich Canals and their links to the local area.

E3 The Partnership will work with others to identify opportunities to promote the historic significance of the canal corridor and connections with famous people or events.

E3.1 Celebrate royal connections with the area through interpretation facilities.

E3.2 Celebrate famous people, both local and national with local connections, through interpretation facilities.

E4 Public arts programmes will be encouraged, where appropriate, along the canal corridor to help develop a new sense of place.

E4.1 Develop a public art programme for the canals, involving local people and schools.

F) Recreation and Access

F1 Access to and from the canal will be planned in a strategic manner through the development of a TVMP and Marketing Plan, incorporating Access for All and social inclusion.

F1.1 Undertake an Access Audit for the canals and surrounding area.

F1.2 Develop a Strategy to guide access provision following the restoration of the canals.

F2 Rights of way in the project area will be recognised. Changes to the PRoW network required for restoration will be kept to the minimum and will be sought following the appropriate legal procedure.

F2.1 Several rights of way exist adjacent to or along the canal corridor. These routes will be prioritised accordingly and where resources allow, improve their condition to make them easily accessible to appropriate users depending on their status as footpath or bridleway.

F3 The Canals and the surrounding area will be managed to provide new and improved opportunities for walking, including towpaths, circular routes and long distance routes.

F3.1 Towpaths created along the canals will comply wherever possible with British Waterways' nationally agreed standards, but surfacing will respond to the landscape character of the canal corridor and surrounding area and the level of use anticipated.

F3.2 Ensure that the treatment of edges alongside towpaths is designed to benefit the local landscape and provide habitats for wildlife.

F3.3 Identify a series of circular walks linking the Canals to other features of interest in the area. Promote these through canal literature, the Canal website etc.

F3.4 Consider opportunities for strengthening links with existing waymarked trails e.g. Wychavon Way,.

F4 The Canals and linking access routes will be promoted where appropriate to provide new and improved opportunities for cycling, including canalside routes, circular routes and long distance routes linking to the National Cycle Network.

F4.1 All proposed lengths of towpaths to be opened up for cycling will be assessed for impacts on safety, other users, the canal heritage, biodiversity and landscape character, and mitigation measures will be identified. Where cycling cannot be safely accommodated or will result in unacceptable impacts the route will not be developed for cycling, and an alternative route will be considered.

F4.2 Consider developing the section of canal between Hanbury and Droitwich Spa as a cycle route to link with the National Cycle Network. Seek opportunities to link the Canals with the proposed Severn Valley Cycleway.

F4.3 Consider developing the offside route between Chawson Valley and Salwarpe Road Bridge as a cycle way

F4.4 Consider developing a cycle route parallel to the towpath between Porters Mill and Ladywood to form part of the National Cycle Network.

F4.5 Identify areas where cycleways could infringe on public rights of way and seek to reach agreement with interested parties

F4.6 Develop and promote a number of circular cycle routes linking to the canals subject to appropriate funding and resources.

F5 The Canals will be managed to provide facilities for boating including a 21 mile cruising ring linking Droitwich to Worcester.

F5.1 Actively promote, along with trade and tourism organisations, the 21-mile cruising ring as a nationally important destination.

F5.2 Develop a mooring strategy within the TVMP for the canals, taking into account landscape, wildlife and recreation issues, to influence the planning and design of restoration proposals through the EIA.

F5.3 Consider as part of the detailed design whether a slipway could be incorporated into proposed engineering works or new developments east of the M5.

F5.4 Consider establishing a Canoe Club and canoe slipway at the Leisure Centre for use by local residents and schools. and consider the need for an Access Code with the British Canoe Union.

F6 The canal corridor will be developed as a linear park incorporating recreation features for a wide variety of users where this is consistent with biodiversity, landscape and heritage policies in this Plan.

F6.1 Provide Primary and Secondary Gateways sites as main access points to the canal.

F6.2 Provide a variety of recreation products centred on the Gateway sites to provide activity and increase enjoyment including picnic areas, angling etc.

F6.3 Focus interpretation and information at the Gateways sites in accordance with the Interpretation Strategy.

F6.4 Identify through the TVMP suitable zones for different recreational activities along the canal, taking into account landscape and biodiversity issues.

F7 Angling will be encouraged on the canals in accordance with existing leases and where compatible with the environment and other users

F7.1 Examine existing angling licences and where appropriate renew with BW Standard Angling Agreement.

F7.2 Liaise with clubs to raise awareness of issues of conflict with other users and the environment.

F7.3 Consider encouraging angling on the sections without cycling

F7.4 Provide fishing facilities for wheelchair users.

F8 The TVMP for the Canals will seek to encourage access to the Canals using sustainable modes of transport, rather than the private car.

F8.1 Carry out a review of existing public transport services as part of the TVMP and identify key areas where additional public transport services could be provided by local transport providers.

F8.2 Identify ‘packages’ of public transport and access routes that can be promoted within and around Worcester for local residents and visitors to gain access to the canals for recreation.

F9 Interpretation facilities will be provided throughout the linear park in accordance with the Interpretation Strategy.

F9.1 Implement the Interpretation Strategy with the following aims:-

- To increase public use, enjoyment and understanding of the canals and their rich heritage and contribution to the history of the area

- To extend the physical range of the typical visit so that the visitor sees and enjoys more
- By achieving these objectives, to maximise the educational, leisure and economic benefit of the canals to the local community and surrounding region.

G) Value to the Local Economy

G1 Canal-based tourism will be promoted in the area to encourage the creation of new tourism-related job opportunities and the safeguarding of existing jobs.

G1.1 Encourage new canal-based tourism and recreation employment within Droitwich Canals corridor, with a target of creating 87 fte jobs.

G1.2 Provide recreational and leisure facilities as part of any mixed use development at Netherwich Basin to encourage visitors to gain access to the town centre to support local businesses.

G2 The Partnership will seek to encourage the development of new businesses along the canal corridor through the restoration of the canal and improved infrastructure, where supported by the Wychavon Local Plan.

G2.1 Encourage the development of new hire/day and other commercial boats, with targets of 20 hire, 5 day, 3 trip and 1 restaurant boats.

G2.2 Provide a high quality built environment to encourage the development of new businesses adjacent to the waterway.

G3 The environment and heritage of the Droitwich Canals will be used as a promotional tool to encourage increased tourism investment in the area and an increase in visitor spending.

G3.1 Encourage new tourism developments in relation to the 'Worcestershire Cruising Ring', with a target of increasing cruising expenditure on other Worcestershire Canals by £282,000 per year. Work in association with the Heart of England Tourist Board.

G3.2 Actively promote the environment and heritage of the Droitwich Canals to encourage visits to local hotels and accommodation.

G3.3 Actively promote the environment and heritage of the canals, with a target of increasing visitor days p.a. to Droitwich Canals by 330,000 per year.

G3.4 Actively promote the environment and heritage of the canals, with a target of increasing tourism and recreation expenditure within Droitwich Canals corridor by £2.45m per year.

G4 The Canals will be managed so as to ensure sufficient resources are available to enable ongoing management of the Canals and linear park.

G4.1 Develop new moorings along the canals to provide for 100 new permanently moored private boats, where this is consistent with planning policy.

G4.2 Canalside developments will be expected to contribute to the ongoing management and maintenance of the environment, which creates added value to the development.

G5 The Partnership will identify and implement new development projects to enhance the built environment adjacent to the Canals, in accordance with the Droitwich Canals Supplementary Planning Guidance

G5.1 Work with partners to bring forward development sites associated with the canal and in accordance with the Droitwich Canals SPG.

G5.2 In identifying, with partners, potential sites for new development, reference will be made to the Supplementary Planning Guidance adopted by Wychavon District Council.

G6 The Partnership will seek to provide benefits to the regional economy by linking the promotion of the Canals with other waterways and tourism facilities.

G6.1 Promote the canals in association with other waterways and tourist attractions in the region to maximise economic benefits, with a specific target of creating 11new fte jobs in canal-based employment on other Worcestershire canals.

G7 The Partnership will seek to provide benefits to local agricultural businesses by providing new opportunities for farm diversification.

G7.1 Work with local landowners to identify opportunities for farm diversification projects and to seek additional funding for implementation.

H) Value to the Local Community

H1 The Partnership will seek to provide a range of opportunities for local people to become actively involved in the management of the Canals

H1.1 Identify and develop community involvement in canal-related projects.

H1.2 Develop, in association with the voluntary ranger service, a series of training courses for local people based on works undertaken along the Droitwich Canals.

H1.3 Involve people in the development and management of the Canals to help to develop a sense of civic pride.

H1.4 In parallel to the restoration, a volunteer network will be established to support the management of the linear park. Management of such a service needs to be agreed between the partners.

H2 The restoration and continuing management of the Canals will provide new facilities to improve the quality of life of local people and develop an improved sense of community.

H2.1 Develop a series of pedestrian links between the town centre and the Canals.

H2.2 Maintain and enhance opportunities to link town and country through improved access routes.

H2.3 Identify and develop key locations which can form attractive meeting places for local people.

H3 The Partnership will seek to link the management and development of the Droitwich Canals with other local initiatives and local political processes.

H3.1 Establish links with Area Fora being developed by the local authorities.

H3.2 Establish links with the emerging Local Strategic Partnership for Droitwich Spa.

H4 The Partnership will seek to be responsive to the views of local people both before restoration and in the long term management of the canal corridor.

H4.1 Develop a programme of community surveys both before and after restoration to gauge the views of local people towards the restoration.

I) Education and Training

I1 The Canals will be actively promoted as an educational resource for both schools and lifelong learning through working with the Local Education Authority.

I1.1 Develop the educational use of the Canals for schools in conjunction with the Worcester and Birmingham Canal and the River Severn. Consider using the restoration process as an educational resource.

I1.2 Develop the educational use of the Canals for lifelong learning in conjunction with the Worcester and Birmingham Canal and the River Severn. Consider using the restoration process as an educational resource.

I2 The Partnership will seek to provide improved access to wildlife as an educational resource where this will not cause harm to habitats or species.

I3 The partnership will seek to develop traditional skills through encouraging active volunteer involvement in the management of the Canals and providing training programmes.

I3.1 Identify those traditional skills that are required in order to undertake the restoration of canal features and set up skills programmes for staff and volunteers. Link courses to the existing Heritage Skills Programme.

I3.2 Develop a volunteers policy that encourages local people to become involved in management and maintenance work.

I3.3 Develop work programmes with a variety of work to encourage local people to do voluntary work in their local area.

J) Health and Human Welfare

J1 Ensure that the canal restoration minimises impacts on areas of tranquillity along the canal.

J1.1 Key areas of tranquillity will be identified during the EIA process and measures will be put in place to ensure no major detrimental effects.

J1.2 Where major works are proposed in areas of tranquillity a noise assessment will be carried out to minimise impacts.

J2 The Partnership will promote the Canals as a location for healthy exercise and will link with local healthy walking initiatives.

J2.1 Retain the availability of the towpath and public open space as a resource for healthy exercise. Expand the length of towpath available.

J2.2 Identify opportunities to further develop the existing healthy walking initiative by improving facilities on the Canal and surrounding area.

J3 The management and development of the Canals will seek to make a positive contribution to carbon fixing and reducing climate change.

J3.1 The project should provide an overall increase in the area set aside for wildlife habitats and this will make a minor contribution to carbon fixing.

J4 Management and development of the Canals will incorporate features to improve the safety of canal users where particular hazards have been identified.

J4.1 Develop a Visitor Safety Plan, using the publication, “Managing Visitor Safety in the Countryside” (Visitor Safety in the Countryside Group) as a guide. This will include lighting, lifebuoys, railings etc

J4.2 Consider opportunities to design crime prevention measures into the scheme eg lighting at key points, defensibility, developments overlooking the canal.

K) Management Plan and Monitoring

K1 Long Term management of the Canals will be guided by a Management Plan, which will set out specific actions and timetables in relation to policies in the Conservation Plan and will be closely linked to the Environmental Impact Assessment

K2 A long-term monitoring programme will be set up following the restoration to measure both the impacts of the restoration works and the economic, community and environmental benefits provided by the project.

8. IMPLEMENTATION

8.1 Project Management

8.1.1 The restoration of the Canals and their subsequent management is likely to be carried out by British Waterways on behalf of the Droitwich Canals Restoration Partnership. This will be subject to a formal agreement once the funding for the project has been secured. A Technical Officers Working Party has already been established as a forum for discussing details of the project amongst the project partners.

8.1.2 It is expected that all the main partners will sign up to this Conservation Plan and will use its policies to guide any work to be undertaken on the canals and within the canal corridor. Different aspects of the Plan will be the responsibility of the members of the Partnership and other organisations with an interest in the future of the Canals.

8.1.3 Key responsibilities still to be finalised, but are likely to include British Waterways being responsible for restoration of the Canals and subsequent management of navigation, Wychavon District in relation to planning matters, listed buildings and Conservation Areas, and Worcestershire County Council in relation to recreational links and the development of the Linear Park concept. The Waterways Trust and the Droitwich Canals Trust will be key organisations in terms of voluntary activity and fundraising. Issues relating to flooding and water quality monitoring will be led by the Environment Agency.

8.2 Using the Conservation Plan

8.2.1 The Conservation Plan can be used at several stages in the planning of any works along the Canals. The table below sets out a recommended process for managing projects and indicates where it is intended that the Conservation Plan will be used.

8.2.2 It is intended that the Plan will be applied to all works and not just those funded through the Heritage Lottery Fund. It will be the role of all members of the Partnership to ensure that the Plan is followed, but the policies are also intended to be applied by other interested parties as well.

8.2.3 In the event of conflicts between the policies, it is intended that where these cannot be resolved by British Waterways or any other authority carrying out works, than it will go to the Technical Officers Working Party for discussion and decision. If agreement cannot be reached it will need to be resolved by the full Partnership meeting.

8.2.4 The Conservation Plan also has a role in relation to works by Third Parties along the Canal. This could include influencing planning decisions on adjacent land, or any work by others that may impact on the Canals or require an agreement with British Waterways or one of the other partners.

8.2.5 British Waterways will need to set up mechanisms for monitoring the uptake of the plan and progress on the key issues identified. Should the Plan need to be revised in the light of experience this will be co-ordinated by British Waterways, in consultation with other partners.

8.2.6 After 5 years, when the restoration is largely complete, it would be appropriate to review the Plan to ensure that the policies included are still relevant to the ongoing management. It is likely that this will link to an ongoing Management Plan for the canals. British Waterways would undertake this review.

8.3 Biodiversity Action Plan

8.3.1 The Conservation Plan is to be supported by a Biodiversity Action Plan, produced in line with BW and AINA policy. This will draw on the ecological surveys of the canals, and the UK and Worcestershire County BAPs to produce a definitive list of key habitats and species for the Canals.

8.3.2 Each of these key species and habitats will have aims and objectives defined for the canals – both as part of the restoration and in ongoing management.

8.3.3 The policies, aims and objectives of the BAP will effectively become a part of the Conservation Plan and will guide the biodiversity element of its implementation.

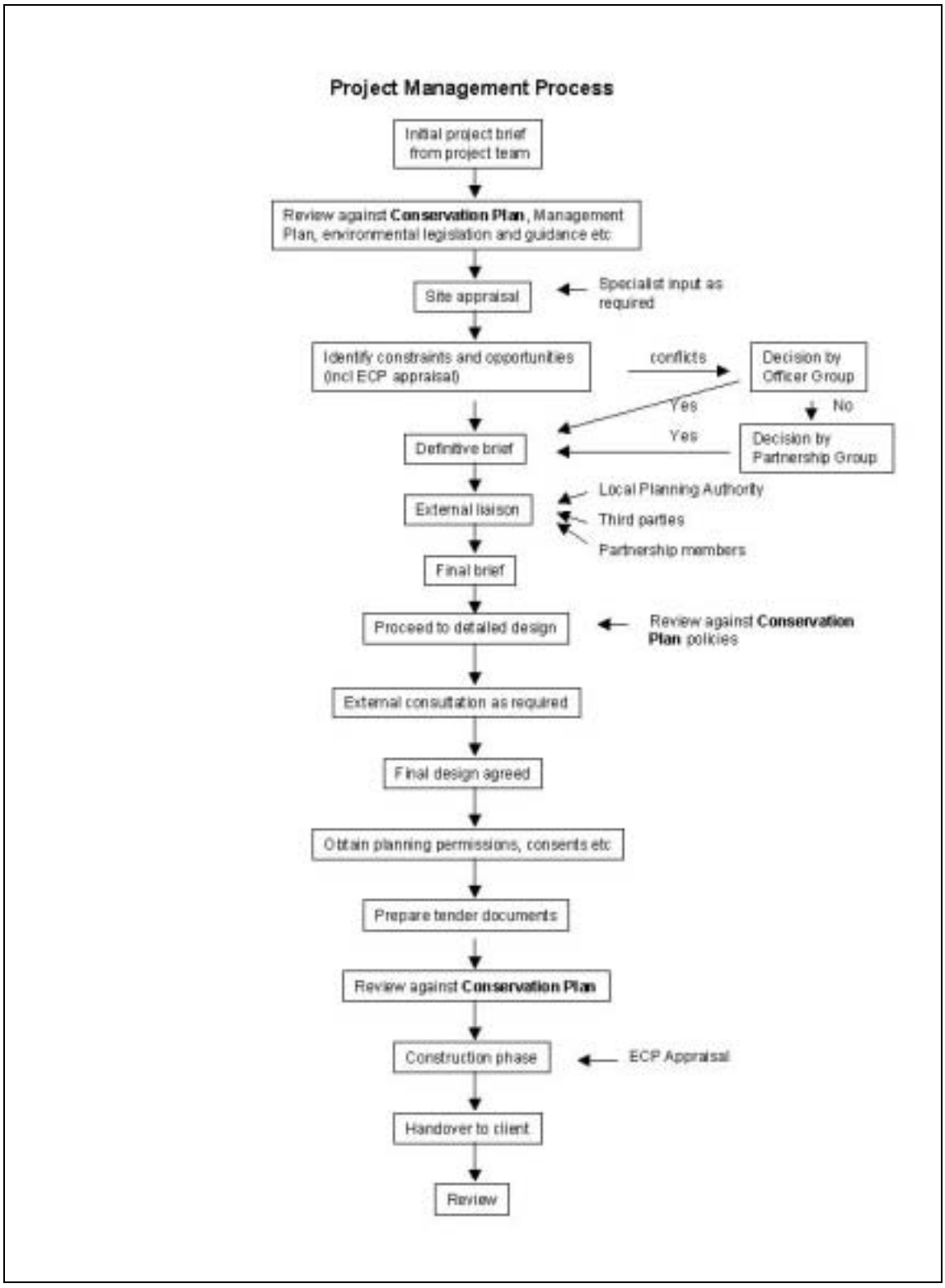
8.4 Environmental Impact Assessment

8.4.1 The Conservation Plan is to be supported by an Environmental Impact Assessment, which considers the likely impacts on features identified through the baseline survey work. It will adopt the policies from the Conservation Plan and use these to undertake site specific assessments in conjunction with the detailed design of specific items of work.

8.4.2 For each topic, an assessment will be made of key environmental features, the magnitude of likely impacts, the significance of likely impacts and actions proposed. These will link directly to the policies outlined in the Conservation Plan.

8.4.3 The assessment will identify mitigation measures to avoid, reduce or remedy potential effects. These measures will address site planning, technical measures and aesthetic and ecological measures. An assessment will also be included of the likely effectiveness of these mitigating measures.

Summary of Project Management Process



8.5 Management Plan

8.5.1 The Conservation Plan aims to provide policies for management of the canals both during and after restoration, but does not identify specific actions and costs, or provide a timetable for works.

8.5.2 The Conservation Plan will form the basis for a long-term Management Plan, which would outline specific actions to manage the linear park and the wildlife, landscape and heritage aspects of the canal corridor. Of particular importance here will be the long term management of the new reed beds adjacent to the canal. Responsibility for such a Management Plan would rest with the operator of the canal, utilising the technical expertise of the project partners.

9. MONITORING

9.1 In order to monitor the success of restoration it is necessary to be able to measure the benefits provided and the impacts of the restoration scheme. This will be undertaken by the development of a monitoring programme, and associated indicators, looking at community, economic and environmental benefits and impacts. This will be developed by British Waterways on behalf of the Droitwich Canals Restoration Partnership, based on their experience of developing such a programme following the restoration of the Kennet and Avon Canal.

9.2 The programme will incorporate monitoring topics are as follows:-

- Biodiversity
- Landscape
- Heritage
- Visitor Experience (Towpath Surveys)
- Community attitudes (Community Surveys)
- Boat Numbers (Counters and Lockage)
- Pedestrian and Cyclist Numbers (Counters)
- Water Quality
- Water Resources
- Economic Benefits

9.3 The first stage of the monitoring programme will be to establish baselines, against which change can be measured. A number of surveys are already in place and a network of pedestrian monitoring is being established.

9.4 Subsequent surveys will be used to measure the benefits provided by the restoration and to inform future management priorities for the canals and their corridor. The frequency of surveys will depend on the feature being monitored, its likelihood to change and the management requirements of the Canals.

9.5 The results of the monitoring work will enable a series of sustainability indicators to be developed and targets set for achieving specific benefits. A draft set of indicators have been set out in the report, 'Summary of the economic, social and environmental benefits of restoring the Droitwich Canals', produced by British Waterways in 2002.

9.6 It is intended that the Conservation Plan will be reviewed after 5 years. This will enable it to be updated in the light of restoration works completed and any issues arising out of the EIA, BAP and TVMP processes. Should any potential changes in policy be proposed in the meantime, they will be subject to consultation with relevant partners within the Partnership and externally.

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11. MAPS

Map 1 – Location Map

Map 2 – Landscape Types and Zone of Visual Influence

Map 3 – Corridor Landscape Characterisation

Map 4 – Biodiversity

Map 5 – Features of Heritage Importance

12. APPENDICES

Appendix 1 – Context

Appendix 2 – Historical Maps of the Droitwich Canals

Appendix 3 – Gazetteer of Heritage Features

Appendix 4 - Quality of Life Capital Assessment

APPENDIX 1 - CONTEXT

The following section outlines the key strategies and plans that currently apply to the Droitwich area and identifies those elements that are relevant specifically to the Droitwich Canals.

- **Waterways for Tomorrow (DETR 1999)**

Waterways for Tomorrow was published in 1999 to set out Government policy towards the inland waterways. It set out a Vision for the waterways as follows:-

"The inland waterways are an important asset for future generations to enjoy and the Government is keen to see them maintained and developed in a sustainable way so that they fulfil their social, economic and environmental potential. We want to ensure that the many benefits and opportunities they provide are used to the full".

The paper sets out an approach to inland waterways that integrates sustainable development principles and particularly promotes their role in urban and rural regeneration. It also sets the direction for British Waterways and other navigation authorities to take in the future.

The Government wants to see policy for the management of waterways integrated with other policy areas, such as leisure and recreation, tourism, sport, heritage, the environment and biodiversity, regeneration, planning and local transport.

The approach advocated for the Droitwich Canals is clearly in accordance with the multi-functional approach being promoted by the Government and adopted by British Waterways.

- **Planning the Future of Inland Waterways (IWAAC 2001)**

This report was produced following Waterways for Tomorrow to further promote the link between waterways and the planning system. It gives guidance on the development of planning policy and recommends that the key value of waterways are in terms of regeneration, sport and recreation, tourism, heritage, culture, natural environment and transport.

It suggests a number of key themes for successful projects, including intrinsic value, accessibility, people-based activity, quality design and providing flagship catalysts for investment.

It further recommends key themes for effective delivery as developing a vision, establishing a project champion, taking a partnership approach, developing a masterplan framework and seeking funding.

The report gives practical advice and guidance on waterway projects and specifically recommends the use of the Quality of Life Capital approach.

The approach being taken for the Droitwich Canals is very much in line with the best practice promoted in this guide.

- **Steering a Fresh Course (Association of Inland Navigation Authorities 1999)**

This is AINA's national strategy for the inland navigations of the UK. It represents a long term action plan for AINA itself, and for each of the members of the Association. It aims to give a unified purpose for all waterways whatever their size or location. By speaking with one voice, with a clear vision of what the waterways could and should be, the Association's members will be in a much stronger position to influence those in power and win the funding needed to secure the waterway network for the future.

The strategic aims outlined in "*Steering a Fresh Course*" are:

Leisure and recreation
To optimise the use of the inland waterways as a shared, sustainable resource for a variety of leisure and recreation activities. In particular for use as navigations.

Tourism and commercial activities
To develop the economic and social contribution of the waterways to sustainable tourism, both as an attraction in their own right and as the link to related local business.

Built and historic environment
To protect and develop the waterway heritage as a living, working environment, with access for all.

Transport and freight
To optimise the economic use of the waterways for freight and passenger traffic, encouraging the Government to make further grants for track maintenance and capital assistance to make waterway freight more competitive.

Natural environment
To recognise, maintain and enhance the biodiversity and landscape value of the inland waterways and their associated habitats and to help members produce plans for their management.

Water resources and other linear movements
To work towards the production of a strategic plan for the conservation and use of water, given climate change and demand for water, which takes account of members' means and obligations. To develop and extend the uses

of the waterway network for the management of water resources and for other transmission purposes.

Resources
To ensure that appropriate management arrangements are in place and that adequate financial resources, manpower and skills are available to secure the greatest economic, environmental and social benefit for the waterways network.

White Paper on inland waterways
To seek to have AINA policies and strategies reflected in the Government's White Paper on inland waterways, which AINA welcomes.

Waterway restoration
To take all practical steps to assist members and those in the voluntary sector in the restoration and management of waterways using best practices. The IWAAC Restoration Priorities Report is welcomed in its recognition of AINA as the representative body for inland navigation. The report is a good start in identifying restoration priorities and will be used as a guide for the future.

Integrated approach to navigation
To establish an integrated approach to management, waterway standards, service levels and licensing, while recognising the diversity and individuality of its members.

Ownership and access
To assist members to find the best way to manage their assets, provide adequate services for navigation, and provide good public access consistent with safety and environmental constraints.

National standards for waterways
To establish a common and consistent set of waterway standards, encourage a common format of reporting, and promote the communication of standards achieved to the public at large.

Prioritised action plan

Since launching "*Steering a Fresh Course*" AINA has drawn up a prioritised action plan for the next two years to take the strategy forward. This includes:

- Developing an environmental framework plan acceptable to all navigation authorities.
- Issuing good practice guidance on waterway corridor studies, cost benefit analysis of waterways, and waterway standards.
- Developing a common approach to the conservation of historic structures and identifying their investment needs.
- Researching the environmental impact of different uses of the waterways.

- Developing a water resources management plan for member authorities' waterways.

- **A Second Waterway Age (IWAAC 2001)**

This report was published in 2001 and is a review of waterway restoration and development priorities. It includes a summary of around 100 projects.

The Droitwich Canals is one of the projects on which IWAAC expects to see most progress. They take the view that all interests involved should treat the project as a priority for completion.

The project is seen as a project of national significance, with the key assets being a high built heritage value and a high wildlife value. The key benefits identified are providing a strategic link and extension to the national system, and urban and rural regeneration.

- **Environmental Code of Practice (British Waterways 1996)**

This document forms an essential part of British Waterways' project planning process. All projects are required to use this code to identify environmental impacts of proposed works.

The Code of Practice sets out a standard procedure in the form of a checklist, which considers impacts both in terms of physical impacts on the site and impacts through the use of resources.

The ECP will be a key element of the process for identifying impacts during the production of the Environmental Impact Assessment.

The purpose of the Environmental Code of Practice (ECP) is to give appropriate emphasis to the environmental and heritage aspects in waterway management, to ensure that BW:

- Comply with environmental legislation
- Deliver policy commitments and improve the business by demonstrating excellence in waterway conservation management
- Achieve sustainability - the application of cost effective solutions that maintain and improve the quality of assets in our control
- Comply with legal environmental obligations including the environmental and recreational duties under Section 22 of the British Waterways Act 1995.

Success in these aspects of waterway management is vital for the future of British Waterways. It will enable BW to build and retain the confidence of partners and to win the resources needed to sustain and develop the network.

The Environmental Code of Practice (ECP) is the framework for that approach. Use of the ECP provides a basis for completing the environmental appraisal required by:

- BW project procedures
- Commercial procedures (acquisition, disposal, licensing of discharges etc, covered by estate management on BW Gateway), and;
- Code of Practice for works affecting BW.

The ECP provides a practical response to BW's general environmental and recreational duties under the British Waterways Act 1995.

The code is set out in sections. Each section can be used alone, but they also cross link and in total form a complete set of documents to guide management of the waterway environment. Sections are as follows:

- Introduction to the code and its use, mission statement and environmental policy.
- Our public commitments to conservation of the environment and heritage.
- Responsibilities of key personnel for environmental and heritage management, presented in an organogram.
- Register of regulations.
- Register of effects.

- **Heritage Principles (British Waterways 2003)**

Priorities

In terms of our historic environment we have three main priorities:

- Increase understanding of our heritage
- Conserve and enhance our heritage
- Broaden access and enjoyment of our heritage

Aims and objectives

Our work is founded on six key principles which include; focusing on the heritage, environment and traditions of the waterways, producing sustainable solutions for the waterways and working to clear standards. The *Heritage principles* are a statement of British Waterways' values concerning the historic environment of the waterways.

The man-made waterway heritage may be defined as historic canals and river navigations, the built heritage, historic landscapes, above and below ground archaeology, and the vernacular crafts and traditions of inland waterways. Our heritage is a resource of irreplaceable historical, cultural, social and economic

value. But a poorly understood resource cannot be properly managed or developed and it is essential that managers and decision-makers appreciate the significance of the historic assets for which they are responsible. The following guidelines and recommended actions provide a framework for this.

The *Heritage principles* are not about the past; they relate to the present and future.

A central plank of the guidelines is that of sustainability; a simple assertion of the idea that British Waterways will perform its operational, commercial and leisure-based business in a way that both conserves and regenerates our unique historic environment.

Guidelines

Historic buildings -

1. All works of repair, maintenance and alteration should demonstrate a respect for the waterway heritage and an approach based on minimum physical intervention involving minimal loss of existing fabric should be undertaken.

2. Interventions should be reversible wherever possible.

3. Regard should be had for the contributions of different periods and phases of work in an historic structure. The historic value, worth and authenticity of such contributions must be judged within the context to which their host structure belongs.

4. The patina of age and use forms part of the historic integrity and value of a building or structure and its removal should only be considered when it is essential to the protection of historic fabric. Falsification of patina should be avoided.

5. Major repairs and alterations should not attempt to imitate historic fabric and replacement of missing parts should not falsify historic evidence in such circumstances. New works should be differentiated from old and discreetly datemarked with the year of construction cut or cast into stone, brick or metal.

6. Before major works to an important historic building or structure take place, research should be undertaken to determine its past appearance, purpose and use. The results of such research should help to guide the planning and execution of major works.

7. Where major works to an important historic building or structure are taking place, physical features should be recorded in a systematic manner.

8. Historic materials, fixtures and fittings are valuable. There should be a presumption that they should remain *in situ*. Where such items cannot be left *in situ* they should be carefully salvaged and stored for re-use in an appropriate context.

Historic landscapes

9. The historic landscape character of individual waterways will be identified, conserved and enhanced. Mechanisms to conserve local distinctiveness will be actively encouraged.

10. Operational maintenance and major works will be planned and designed so as to minimise their impact on the waterway landscape.

11. Consideration of landscape character, setting, and local culture will influence the design and planning of water based and waterside development.

12. British Waterways will seek to manage the physical impact of human activities in order to protect the landscape heritage.

13. British Waterways will seek, through national and local planning policies, to encourage adjacent land uses and development which will not conflict with the historic landscape character of the waterways.

New development

14. The enhancement and conservation of the landscape heritage will be promoted through the use of the British Waterways' *Design Manual*, the *Environmental Code of Practice* and the development of Conservation Plans for individual sites and waterways.

15. New construction, infill or additions can be acceptable in an historic setting provided these maintain an appropriate visual context of form, scale, texture, materials and do not reduce the cultural significance of the setting.

16. Sustainable and compatible new uses which respect the equilibrium of the waterway heritage and do not engender processes of decay, will be encouraged.

17. Imitation of traditional forms involving re-creation or replication of a building or setting should be avoided in new works and alterations.

18. Restoration schemes and new developments in historic settings should be identified as affecting 'critical heritage assets' and their planning and execution will be given integrated, multi-disciplinary attention.

Archaeology

19. Where works of repair, alteration or development are taking place at an historic site, archaeological recording methods should be used to guide works.

20. Archaeological records should be placed in the permanent Waterway Archive and made publicly available.

Interpretation and public events

21. Public affection for the waterway heritage should be actively aroused through participation in a series of national heritage days as well as through festivals, exhibitions, publications and a range of practical 'hands-on' events.

22. Interpretation should exploit the local distinctiveness, landscape, archaeology and cultural associations of individual historic waterways.

23. Information should be presented in a stimulating way and signage should be carefully designed and integrated into historic sites with minimum intrusion.

24. Where appropriate, modern information technology should be used to provide regularly updated and high quality information.

25. Respect for the historic environment will be encouraged by providing opportunities for volunteers and young people to take part in heritage training days, joint recording exercises, competitions and restoration projects.

26. The resource of waterway archives, artefacts and oral history recordings will be made available to researchers, educationalists and the general public.

Human resources

27. All personnel working on archaeological sites or historic buildings or structures will have sufficient competence and expertise.

28. Regular opportunities will be given to in-house staff and contractors to attend nationally accredited heritage training courses.

- **Biodiversity Action Plan Framework (British Waterways 2000)**

Although not a biodiversity action plan in itself, this document sets out guidance for producing Biodiversity Action Plans for individual waterways. It is the intention that such a plan will be produced for each waterway and this will include the Droitwich Canals. The document is set out in two volumes as follows:

Introductory BAP framework document - The introductory brochure introduces British Waterways' biodiversity action plan framework and describes the many habitats and species that make up waterway biodiversity. These vary from obscure and exciting rarities such as grass-wrack pondweed and floating water plantain to more familiar and well-loved species such as water voles, dragonflies and mute swans.

BAP Manual - The Biodiversity Manual gives guidance on how to begin waterway biodiversity action planning and sets out an overview of each local county. There is additional information and guidance on habitats and species and actions that can help them.

These two documents can be used by waterway management teams and partners to develop biodiversity plans and objectives for local waterway units, or even individual canal sections. Much will be achieved by developing partnerships – BW's biodiversity objectives overlap with national and local BAPs and the key to implementation is to work jointly with partner organisations.

- **Waterway Standards – draft revision (British Waterways 2003)**

British Waterways has produced a series of standards that users of the waterways can expect of all British Waterways navigations. These are currently (2004) being reviewed and it is intended that the revised standards will be adopted for the restoration of the Droitwich Canals.

The waterway standards have been designed for a number of purposes including as a:

- Means of indicating to customers the level of service they can expect at a particular site or length of waterway.
- Means of ensuring consistency and appropriateness across the network.
- Guide for business unit managers to assist with works planning.
- Guide to the level of service to be built into external contracts.
- Internal performance measurement framework.

Waterway standards were introduced in 1993 with the current standards based upon a revision in 1999. Initially designed around the boater, standards for towpath were added later to take account of towpath users. Nevertheless, waterway standards have remained primarily concerned with the provision of infrastructure and services for boating customers. Standards are currently applied to the following:

- Navigation
- Environs
- Channel
- Towpath

Separate Waterway Standards relate to the needs of anglers, boaters, cyclists, walkers and waterside visitors.

- **Landscape Character Assessment (Worcestershire County Council 1999)**

The Landscape Character Assessment for Worcestershire was published in draft in 1999. It is designed to support planning policies in the County Structure Plan and District Local Plans and to help in prioritising work to maintain and enhance the landscape of the county. It was developed in association with the Countryside Agency and adds more detail to the Agency's own Countryside Character Areas.

The assessment seeks to develop an approach to landscape planning that considers the whole countryside rather than relying on local designations. This is consistent with the recommendation of Planning Policy Guidance Note 7. It divides the county into Landscape Character Areas based on differences in landform, geology, soils, vegetation, land use and settlement pattern.

The assessment also identifies a number of landscape types, which are particular landscapes that occur in a number of places in the county. They form sub-areas within the Landscape Character Areas. For each of these

types, key features are identified and guidelines are proposed for their conservation and enhancement.

A detailed summary of the relevance of the Assessment to the Droitwich Canals is included below under the Assessment of Significance. For projects such as the Droitwich Canals, the key issue is how the canal corridor integrates with the surrounding landscape and enhances the key features that contribute to local character.

- **Biodiversity Action Plan (Worcestershire Biodiversity Partnership 1999)**

The Worcestershire Biodiversity Action Plan (BAP) was published in 1999. It identifies key habitats and species in the County and outlines policies and actions for their management and enhancement. The BAP priorities are informed by 'Endangered Wildlife of Worcestershire, the County Red Data Book', which was compiled as a result of a wildlife audit of the county.

Many of the habitat and species action plans are relevant to the Droitwich Canals and may provide opportunities for enhancements.

Key Habitat Action Plans include Ancient / Species Rich Hedgerows; Scrub; Woodland; Wet Woodland; Reed Beds; Fen and Marsh; Lowland Wet Grassland; Urban; Canals; and Rivers and Streams.

Key Species Action Plans include European Otter; Bats; Water Vole; and Great Crested Newt.

Further details of the significant habitats and species are included in the Assessment of Significance below.

- **Middle Severn Local Environment Agency Plan (Environment Agency 1997)**

The Agency's Vision for the Middle Severn Area is "to protect and enhance the natural resources and beauty of our local area, for all to enjoy". This vision is to be achieved by the following:-

  - Seek to ensure that development in the area is environmentally sustainable.
  - Educate and raise awareness of the environment and environmental issues.
  - Protect and improve the landscape, conservation and recreation value of our environment.
  - Manage our water resources in an environmentally sustainable way, balancing abstraction with the needs of the water environment and its legitimate users.
  - Protect and improve the quality of water in rivers and canals.

All these actions are relevant to the Droitwich Canals and the Canals should be able to contribute to the Vision.

The Droitwich Canals are not specifically mentioned in any of the issues or key actions in the Action Plan. It does, however, recognise that "scope exists for restoration of derelict canals, subject to this being environmentally sustainable", and with this proviso the Agency gives its support to the Droitwich scheme.

Issues that may be relevant to the Droitwich Canals include Issue 8 – degradation of wetland and riverine habitats; Issue 11 – protection of existing high quality riverine and other wetland habitats; Issue 12 – protection of biodiversity; Issue 13 – protection of high quality coarse and game fisheries; Issue 14 – the protection of high quality water resources; and Issue 19 – opportunities for amenity, recreation and navigation.

- **West Midlands Regional Planning Guidance (West Midlands Local Government Association 2001)**

The West Midlands RPG is currently at the draft stage. The draft report was published in November 2001 and a Public Examination took place in June and July 2002. The aim of the RPG is to guide the development of Structure and Local Plans by local authorities.

The principal aim of the draft RPG is to encourage an urban renaissance in the West Midlands, in line with Government policy. Specific policies on urban renaissance that relate to the Droitwich Canals encourage quality open space and urban design (UR1) and job creation (UR2).

Policies on a rural renaissance are also relevant to the Droitwich Canals. Although the Canals are outside the priority Rural Regeneration Zone (RR1), the RPG seeks to encourage rural diversification (RR3), sustainable tourism in rural areas (RR4) and the regeneration of market towns (RR5). Policy RR4 on tourism includes particular mention of the opening up of inland waterways. There is a separate policy (PA12) on tourism and culture, which encourages development of the canal network.

The Quality of Environment policies seek to encourage a sustainable approach, linking environmental issues to economic and social issues. Policy QE1 relates to environmental capital, and the Quality of Life Capital approach, as used for this Plan, is one of the key tools recommended for project appraisal. Policy QE2 includes a commitment to regeneration schemes, particularly the enhancement of degraded areas and the creation of new environments. Policy QE3 encourages the development of a quality built environment. The canal network is specifically referred to in Policy QE4, which seeks to retain a high quality historic environment, and more specifically, the historic transport network. Policy QE5 supports the landscape character

approach being adopted by the Worcestershire local authorities and as a key feature of the Conservation Plan. QE6 supports biodiversity.

A specific policy (QE10) on the Water Environment is included. This seeks to "maintain and enhance river and inland waterway corridors as key strategic resources, particularly helping to secure the wider regional aims of regeneration, tourism and the conservation of the natural, built and historic environment".

The protection and management of inland waterways is identified as providing an important recreational resource (QE13).

Therefore the restoration of the Droitwich Canals and West Midlands Regional Planning Guidance can be seen to be mutually supportive, and as this should be supported by future Local Plans or the proposed Local Development Frameworks.

- **Worcestershire County Structure Plan 1996 – 2011 (Worcestershire County Council 2001)**

The County Structure Plan 1996 – 2011 was adopted in 2001. It seeks to encourage an approach to development based on the principles of sustainable development. The main sections relating to the Droitwich Canals are those on Conservation of Town and Country (Chapter 5) and Recreation, Sport and Tourism (Chapter 8).

The Conservation chapter encourages the landscape character approach to be adopted (CTC.1). All developments are expected to be informed by, and sympathetic to, the landscape character of the area. They are expected to strengthen features and patterns and relate to the sensitivity of the landscape and its location.

A specific policy (CTC.5) is included on Trees, Woodlands and Hedgerows. Issues of relevance to the Droitwich Canals are the establishment, restoration and management of native woodland, tree planting schemes and the conservation of veteran trees.

Policy CTC.6 seeks to encourage the creation and conservation of green open spaces and green corridors, with particular reference made to watercourses.

The impact of development on watercourses and aquifers is covered by Policy CTC.9. This seeks to ensure there is no pollution of surface water or groundwater.

Policy CTC.12 covers the protection of Special Wildlife Sites. Development or land use change that is likely to adversely affect such a site will not be allowed unless the benefits of development can be shown to outweigh the nature

conservation value of the site. In the event of development 'adequate compensatory measures' are required.

The Plan includes policies on species and habitats of conservation importance and seeks to support the implementation of the Biodiversity Action Plan. (CTC. 13-15).

Under Cultural Heritage there are policies on the protection of archaeological sites of national, regional or local importance (CTC.16-17), for the enhancement and management of archaeological sites (CTC.18) and the protection of areas and features of historic and architectural significance (CTC.19).

The character and appearance of Conservation Areas are to be preserved and enhanced through Policy CTC.20. This includes the consideration of the setting of that Conservation Area and any proposals for the demolition of buildings.

Under Recreation, Sport and Tourism a number of criteria are set out for the development of recreation and sport facilities (RST.1) and the location of informal countryside recreation developments (RST.2). The restoration of the Canals meets most of the requirements under these two policies, particularly in relation to landscape, nature conservation and archaeological requirements, and inter-linkages with other recreational facilities.

Recreational walking, cycling and horse riding routes are encouraged by the Plan (CTC.4-6) and canal towpaths are particularly identified as potential cycle routes. The proposals for the Droitwich Canals largely comply with these policies.

Policy RST.9 is the principal policy relating to the Droitwich Canals. It encourages improved access to waterways where it does not conflict with other Structure Plan policies. It specifically protects the alignments of the Droitwich Canals from development likely to obstruct restoration. It proposes that the towpaths will be incorporated into the county network of recreational facilities. The policy includes controls on linear moorings, other than for overnight stays, and proposes that permanent moorings will be located in basins or marinas.

The Structure Plan also seeks to encourage the development of tourism in the County where compatible with landscape, nature conservation and archaeology (RST.14-15).

- **Wychavon District Local Plan (Wychavon District Council 2002)**

The First Deposit Draft of the Wychavon District Local Plan was published in 2002. It covers the period to 2011 and has been approved for development control purposes.

The Plan adopts the Government's agenda for sustainable development and has the following aim:-

"An improvement in the economic and social well being of communities whilst protecting and enhancing the environment in order to improve quality of life".

Within this aim the plan sets out 10 objectives related to social, economic and environmental issues.

The restoration and development of the Droitwich Canals is consistent with the key requirements for location of development in that built development would be likely to be concentrated in or adjacent to the main towns, a proportion of development would be in villages to support rural regeneration and it will make maximum use of previously developed land.

The Plan sets out 3 general development policies on location (GD1), criteria for general development control (GD2) and planning obligations to meet sustainable development objectives and deal with impacts on the community (GD3). The canal restoration can largely comply with these policies.

Under a section on Strategic Requirements, the Canal Basin is specifically allocated for mixed use development (SR4A) and the route of the canals is safeguarded for potential improvements (SR6). The explanatory memorandum commits Wychavon to supporting the restoration of the canals.

The Environment section of the Plan contains a number of policies similar to those in the Structure Plan and many of them contain specific criteria against which development proposals will be assessed. Policies of particular relevance to the natural environment of the Droitwich Canals relate to landscape character (ENV1), sites of regional of local wildlife importance (ENV5), protected species (ENV6) and protection of wider biodiversity (ENV7).

Policies are included on the protection of sites of archaeological importance (ENV 9-10) and on the evaluation of sites prior to development (ENV11).

Several policies relate to the built environment, including enhancing the character, appearance and setting of Conservation Areas (ENV13), demolition and alterations to Listed Buildings (ENV14-15) and the settings of Listed Buildings (ENV16).

Water issues are covered by a separate section with policies relating to flood risk, surface run off and water pollution (ENV17-20).

The redevelopment of contaminated land is supported where harm to human health and the environment can be alleviated (ENV21).

Under social issues the Plan encourages cycling and walking as part of new developments (COM1).

A specific policy is included on Waterways (COM18). This includes a number of criteria, against which proposals for development will be assessed. These include the effect on the surrounding environment; new build to be on the edge or within urban areas; permanent moorings are not normally permitted; new build to provide parking; schemes should contribute to tourism and they should be appropriate to the scale and character of the surrounding area.

Policies SUR1-5 are related to enhancing people's surroundings and include policies related to design, landscaping and local distinctiveness, all key issues for the canal restoration.

The Plan supports the development of tourism in the area and has a specific policy to encourage farm diversification (ECON8).

The Plan will be supported by Supplementary Planning Guidance, including the Droitwich Canals Development Framework and development sites at the Canal Basin, the Land Rover Garage, Hanbury Locks and the Saab Garage.

- **Partnership Towards Excellence - A Community Strategy for Worcestershire (Worcestershire Partnership 2003)**

The Worcestershire Community Strategy is a requirement of the Local Government Act 2000, and seeks to address the economic, social and environmental well-being of the county. It is steered by the Worcestershire Partnership. The Community Strategy for Worcestershire was published in 2003 and will be supported by strategies at District level. It sets out a vision for Worcestershire for the10 years to 2013.

The Strategy envisages Worcester as "a county with safe, cohesive, healthy and inclusive communities, a strong and diverse economy and a valued and cherished environment". This is supported by an Action Plan outlining shorter term priorities and a monitoring , review and reporting process.

The policies and actions proposed in the Community Strategy are largely strategic and there is no specific mention of the Droitwich Canals. However, many of the key issues, such as culture, economic development, environment, health and well-being, lifelong learning and social inclusion, are directly relevant to the Droitwich Canals.

- **Worcestershire Tourism Strategy 2002 – 2005 (Worcestershire County Council 2002)**

Surveys undertaken for the Strategy indicated the following in terms of the visitors to the county:

- 58% of all visitors to the County are on a day trip from home
- 16% are domestic visitors touring in/through Worcestershire
- 20% are domestic visitors staying overnight in the County
- 5% of all visitors are touring overseas visitors
- 2% of overseas visitors are staying overnight in the County

The Strategy identified the following key facts in relation to Worcestershire:

- 12.9 million visitors come to Worcestershire each year
- Only 11% of these visitors stay overnight with the large majority on a 3 hour or more trip from home or a holiday base
- An estimated total of £399 million was spent by these visitors to Worcestershire
- This expenditure supports 11,370 jobs directly and a further 4,200 non-tourism jobs dependent on the 'multiplier effect' from tourism
- Tourism supports jobs directly in five key business sectors in the county, these are accommodation, retailing, catering, leisure / attractions / entertainments and transport services

Strengths

- Geography and natural beauty
- History and heritage (including historic houses, Cathedral, Civil War links)
- Central location, good road transport (motorways)
- Shopping and retail
- Visitor attractions
- Arts and culture
- Food and drink
- Sport and leisure
- Some good conference facilities
- Family appeal

Weaknesses

- Image and marketing

- "Where is Worcestershire?"
- Lacking hotels and quality accommodation
- Poor coach and bus services
- Appeals more to older generation
- Under-developed riverside in Worcester
- Poor rail links
- Limited range of attractions in some parts of the county
- Parking problems including cost
- Lack of international 'Icon'

The overall **mission** for work in supporting tourism is:

"To help provide a high quality experience for all our visitors and to bring economic, social and environmental benefit through a growing and sustainable visitor economy".

This strategy seeks to help fulfil this mission. It is guided by **five policy aims** which are:

- To increase the income from tourism through increasing visitor spend and reducing the seasonality of visits
- To increase the range and number of places and activities which attract visitors thereby increasing the benefit to local businesses and lessening any adverse impact on established 'honey pot' destinations
- To build partnership working between local authorities, with the tourism sector and other agencies concerned with tourism to ensure an effective strategic approach
- To strengthen links and co-ordination between tourism support and other initiatives including Community Plans, Economic Development, and Cultural Strategies
- To ensure value for money and effective use of the limited resources available to support tourism in the county.

Four strategic priorities for the Worcestershire Tourism Strategy have been identified:

- Build a strategic approach to supporting tourism
- Address quality issues in tourism
- Provide effective support to tourism businesses
- Work for a sustainable future for tourism in Worcestershire

- **Worcestershire Cultural Strategy 2002 – 2007 (Worcestershire Partnership 2002)**

This Strategy was produced by all the local authorities in Worcestershire and involved their local communities in identifying what is important about life in Worcestershire and how it can be made better.

The Strategy is based on 4 principles:

- Working in partnership
- The public, private and voluntary sectors must be involved
- The Cultural Strategy should feed into other public documents
- The Strategy must be owned by local communities

The Strategy proposes to celebrate what is best by:

- Getting to know better Worcestershire's diverse communities and celebrating their distinctive way of life
- Celebrating our cultural heritage, our landscape, towns and villages and waterways, both for residents and visitors

The Strategy seeks to increase participation in cultural activities and to build a cultural partnership to take forward the Strategy.

- **Worcestershire Countryside Access and Recreation Strategy 2003 – 2013 (Worcestershire County Council 2003)**

This provides a strategic management framework for issues relating to countryside access and recreation within Worcestershire. It is particularly relevant in relation to the Droitwich Canals as it aims to assist in the determination of planning applications, support proposals for grant applications and influence the future provision of facilities and opportunities.

The Vision developed by the partnership for this Strategy is:

"To develop a countryside recreation culture in the County in which residents and visitors alike benefit from the possibility to access a range of high quality countryside recreation opportunities. This will be planned and implemented having respect to the wishes of both landowners and the local community and ensuring the utmost protection of environmental interests".

The following broad aims were identified in the Strategy to address the key issues:

- To continue to pursue and establish partnership between organisations, and with local communities, for projects, funding and the joint promotion of activities;

- To encourage better understanding of the needs of all users, and landowners, and promote responsible use by participants, and by land managers to minimise conflict with local residents, landowners and other users;
- To share and adopt common working practices in regard to information exchange and standards of service and provision;
- Promote and adopt sustainable practices of recreation provision to maintain and enhance the environmental quality of the countryside;
- Meet the access needs of those who have limited opportunity to enjoy the countryside;
- Raise awareness and understanding of the benefits and opportunities associated with countryside recreation in the County to visitors and local community. This should include the rural regeneration role and its health and wellbeing aspects;
- Increase the quality and range of opportunities for the enjoyment of the countryside in a manner that maintains and enhances the environmental quality, and is appropriate to local character and meets identified needs;
- Provide a strategic focus to help shape and assist the formation of appropriate planning policies and for use in determining planning applications;
- To promote the recognition and adoption of the objectives and policies within this strategy in other policy documents, both statutory and non-statutory.

The Strategy sets out strategic objectives to meet the above aims and each is supported by one or more policies. All the broad aims and objectives of the Strategy are relevant to recreation and access provision along the Droitwich Canals corridor.

The Strategy identifies rivers, canals and water bodies as having potential for additional access land.

Policy AL2 promotes the use of canals as greenways from towns into the countryside.

Policy T5 supports and promotes the use of the canal network as a means of access to the countryside, where it is in accordance with other policies in the Strategy.

- **Creating Advantage – the Regional Economic Strategy (Advantage West Midlands 1999)**

In addressing conservation issues in this Plan it is necessary also to consider how this can provide the right conditions to encourage economic development. Wherever possible projects undertaken on the canals should seek to help in the delivery of priorities from the Regional Economic Strategy.

Advantage West Midlands co-ordinated the development and publication of 'Creating Advantage' in 1999, the first ever comprehensive economic development strategy for the region. Working with a large number of regional and sub-regional partners, Advantage managed a programme of research, consultation and drafting to create a strategy that is visionary yet pragmatic.

The two key themes that will drive all the actions are:

- creating wealth through enterprise and
- providing access to opportunity.

The strategy now provides a framework within which Advantage, and partner organisations in the region, can target resources to common cause and to best effect.

The Strategy has four key components, backed by specific aims :

- developing a diverse & dynamic business base
- promoting a learning & skilful region
- creating the conditions for growth
- regenerating communities

Running across and through these components there are four common frameworks to:

- build a sustainable future;
- develop a new and creative culture;
- support links between urban and rural areas;
- value equal opportunities;

The restoration of the Canals and the associated development opportunities can make a clear contribution to furthering the aims of this Strategy. Further information on the contribution the Droitwich Canals can make to the Economic Strategy were included in a separate benefits report and the funding bid made to Advantage West Midlands in 2001.

APPENDIX 2
HISTORICAL MAPS OF THE DROITWICH CANALS

Several historic maps which include the Droitwich Canals help illustrate the canal development between Salwarpe and the junction where the Droitwich Canal meets the Worcester and Birmingham Canal. The following maps are of significance and a brief analysis of some of the maps has been made.

A Plan of the River Salwarpe, and of the intended Navigable Canal, from Droitwich to the River Severn in the Country of Worcester. Surveyed in October 1767. By Rob Whitworth Del, Weftwood, Scup(?), Birmingham. (Worcestershire County Records BA1006 REF54/2614)

The map produced in 1767 shows the planned canal from the centre of Droitwich to the River Severn near Hawford. The map shows Droitwich on the left of the map and Hawford on the far right. The area was surveyed in October 1767 and the map divides the progression of the canal into stages from A to B, B to C and C to D. These divisions indicate the Length and fall of the canal in these areas and illustrate that the intended canal would be 5 ¾ miles in length and would fall approx 59.6ft during its course.

The map highlights the various settlements near the River Salwarpe and clearly show how the proposed canal would divide some of these settlements in two for example Ladywood and Salwarpe. It appears that Salwarpe is the largest development after Droitwich.

A Plan of the River Salwarpe and of the Navigable Canal from Droitwich to the River Severn in the County of Worcester. (Gentleman's Magazine 1771) (Worcestershire County Records BA1840 REF899:210/1)

The map which appeared in Gentleman's Magazine in 1771 shows the new navigation between the River Severn and Droitwich which was built between 1768-1771. The map is an exact copy of the map from 1767 although there is now a reference to a road to Worcester from Droitwich.

An Accurate Map of the Droitwich Canal Navigation – Survey'd in 1779 by Thomas Allen. (Worcestershire County Records BA1006/54 REF2614)

Unlike the previous maps of 1767 and 1771 this map of the Droitwich Canal in 1779 shows Droitwich on the far right and Hawford to the left. Four 'Swivle' Bridges, four locks and seven other bridges are highlighted on the map which is relatively simple in detail. The map was apparently produced for the 'ready finding the situation of any piece of land up on the Canal'.

Plan of Droitwich Junction Canal November 1851 appearing in Book of Reference 29th November 1851. (The Waterways Trust Archive: Gloucester)

The plan and section shows the proposed navigation intended to connect the Droitwich 'Barge' Canal with the Worcester and Birmingham Canal. The plan

includes the Worcestershire Parish boundaries of St Andrew's, St Peter's, Doddershill, Hanbury, and Hadsor and indicates that the proposed canal would divide St Peter's Parish and would also divert the River Salwarpe.

The Stoke branch of the Oxford and Worcester Railway is included on the map leading out of Droitwich.

Plan of Barge Basin 1853 (The Waterways Trust Archive: Gloucester)

Showing the Canal Company holdings approx. 1853 just before the construction of the Junction Canal.

Original Map of Droitwich made in 1854. Reduced and copied by Webb & Buck, Surveyors, Worcester 1858. (Worcestershire County Records BA1840)

The map shows the ownership of various land in Droitwich including the land owned by the Droitwich Canal Company. It indicates five bridges on the canal and shows where the Canal joins the River Salwarpe. It also illustrates the relationship which the Canal Company shared with various trades in Droitwich (including the salt) trade, though the existence of several basins and wharves in the centre of Droitwich. From the map it appears there were 5 basins and one main 'public' wharf in the town off Friar Street belonging to the Canal Company.

Plan of Droitwich Basins post 1854. (The Waterways Trust Archive: Gloucester)

The archive dates it as 1900 but it is likely the plan is earlier.

Plan of barge lock detail (The Waterways Trust Archive: Gloucester)

This plan shows the proposed infil of a short arm by the barge lock and detail of piling. Date shown in archive is 1900.

Plan of Droitwich Town Wharves East (The Waterways Trust Archive: Gloucester)

Approx 1900, showing the barge lock and east of Chapel Bridge.

Plan of Sharpness New Docks, Gloucester & Birmingham Navigation Company 1909 (The Waterways Trust Archive: Gloucester)

Profiles of the Droitwich Canal and Droitwich Junction Canal.

Ordnance Survey County Series Published 1888 to 1889 (All OS Maps provided by the Landmark Information Group Limited)

The map shows the Salt Works in Droitwich and their close proximity to the Droitwich Canal and the Railway.

Ordnance Survey County Series Published 1903 to 1905

At the junction where the Droitwich Canal meets the Worcester & Birmingham Canal a wharf (Hanbury Wharf) and basin are evident. Within Droitwich the salt mills are still evident and a gas works and sewage works are adjacent to the canal.

Ordnance Survey County Series Published 1930

Ordnance Survey County Series Published 1938

Plan accompanying the Droitwich Canals (Abandonment) Bill, House of Lords Session 1938-39 (The Waterways Trust Archive: Gloucester**)**

The map indicates all the holdings in the ownership of the Sharpness Docks & Gloucester & Birmingham Navigation Company.

Ordnance Survey Plan Published 1954

The maps OS Maps between 1930-1954 show that during this period Droitwich has expanded and developed. The sewage farm is still evident on the western side of the town but the gas works and salt works have disappeared.

Ordnance Survey Plan Published 1964 to 1968

Ordnance Survey Plan Published 1970 onwards

Where the Droitwich Canals are shown, the OS maps from 1970s onwards indicate that the Droitwich Canal is disused. Details of the original line of Junction Canal are progressively absent and by 1987 sections have been divided into separate riparian ownership.